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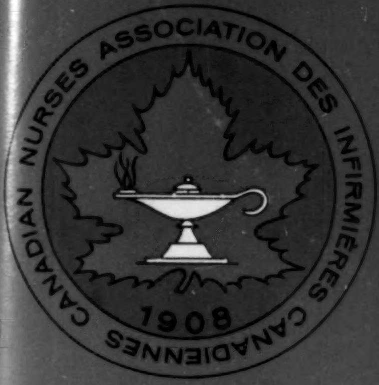

VOLUME 57 • NUMBER 3
MONTREAL

MARCH 1961

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[1] Marks, M.M.: Am. J. Digest. Dis. 18:219, 1951

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Richard P. Wilson, 801 Public Ledger Building, Philadelphia 6, Pa.

Address advertising enquiries to:
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The views expressed in the various articles are the views of the authors and do not necessarily represent the policy or views of THE CANADIAN NURSE *nor of the Canadian Nurses' Association.*

Executive Director and Editor: Margaret E. Kerr, M.A., R.N.
Associate Editor: Jean E. MacGregor, B.N., R.N.
Assistant Editors: Gabrielle D. Coté, M.A., R.N., Pamela E. Poole, B.N., R.N.
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Subscription Rates: Canada & Bermuda: 6 months $1.75; one year, $3.00; two years, $5.00.
Student nurses — one year, $2.00; three years, $5.00.
U.S.A. & foreign: one year, $3.50; two years, $6.00.
Single copies 35 cents.
For subscribers in Canada, in combination with the
American Journal of Nursing: 1 year, $8.00; *Nursing Outlook:* 1 year, $7.00.
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Between Ourselves

As the copy for this column is being prepared, the new year is just beginning. Actually, this section is almost the last part of the March issue to be written. All of the excellent series of articles on eye conditions had been edited and prepared for translation at least a month ago. Even though it is still very early in January, the editorial staff has reviewed and decided upon all of the major articles that will be published as far as ahead as the June issue. We have planned already that we shall publish in the July number the student nurse entries in the Macmillan Award Competition that are awarded prizes.

All of this is apropos the fact it is several years since we last published the small section entitled "Preview." Quite a number of people have asked us why we do not indicate, at least a month in advance, the major articles that will be published. Recognizing the fact that your interest may be piqued sufficiently that you will be even more careful about sending in your change of address well ahead of time, we are reintroducing this item. Look for the filler caption — "Coming!"

* * *

Speaking once again about changes of address, this morning's mail included three letters that repeated a very common question. Those subscribers had each failed to send us their change of address until today — four months after they had moved! They each realized that the error was their own, not ours. Yet, each of them requested that we send them all the back issues they had missed. Three copies we might manage to find but multiply that three by all the people who forget and it becomes an impossible request to meet.

Here is our problem in a nutshell. The printers will start to run the presses for the February issue of the English edition next Tuesday, January 10. We have to give them a definite figure for the number of copies we will require. Since it is much too expensive a business to produce enough copies each month to meet every possible late request, the only way any subscriber can be sure that she will receive her copies without interruption is to let us know where she is living so that she will be included in our original count. The post office will transport the copies to any place in the world — but they do *not* keep trying to trace you when you move.

* * *

None of our editorial staff realized how few articles for nurses had been written on ophthalmological conditions until the articles for this month's issue came in. We were aghast at the dates on many of the references that were cited. Imagine it — in 1961 referring a reader back to something published on eye care in 1938! Library authorities whom we consulted could give us no assistance in finding later editions of equivalent material.

Miss MacGregor's editorial indicates why we feel the assembling of many articles on a single focus is valuable. We hope that as you read, as you put this issue away carefully for future reference, you will agree with us.

Assembling all of the articles for such a series is usually a long and painstaking task. Great credit is due our Alberta Editorial Advisor, Miss Irene M. Robertson, who worked closely with Dr. M. R. Marshall in the development of the topic.

* * *

Within a very few weeks after this issue comes from the press, a sizable contingent of Canadian nurses will be joining their colleagues from other member countries of ICN for the long trek to Melbourne. The main tour, arranged through Thomas Cook & Son by the CNA, flies out from Vancouver in the afternoon of April 1. Two days in Honolulu, three days in Fiji, a week in New Zealand, then Australia. Some will be flying directly home from Sydney. Others are planning for longer periods in the Far East before they return.

Your editor will be aboard the flight from Vancouver. It is planned that the story of the Congress plus, perhaps, some sidelights on the tour will be the lead article in the July, 1961 issue.

Mother's note to teacher: "Please send Michael to the clinic at half-past two with his eyes, because they close at three."

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Description—28-page manual consisting of: a chart which explains special precautions to be observed in the care of 12 different floor surfaces and the types of products recommended for their upkeep; procedure for cleaning and finishing floors, daily maintenance, and safety suggestions; sections dealing with general cleaning, e.g., washing of walls, ceilings, windows and washrooms; a section on the cause, cure and method of prevention of 16 major maintenance problems and tips on the removal of floor and carpet stains. For free copies write to: Service Products Division, Johnson's Wax, Racine, Wisconsin.

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Random Comments

Dear Editor:

May I commend you for including the article "Intergroup Relations in Occupational Health Nursing" by Dr. Charlotte Epstein in the November, 1960 *Journal.* She has made statements which point up the group interrelationships which are important to a nurse giving service in occupational health and it has more strength because it is written by one in another discipline who is looking in on the nurse in her position in industrial relations.

I should like to draw your attention to "A Guide to Interviewing and Counselling for the Nurse in Industry" printed in the August, 1960 issue of the *American Association of Industrial Nurses Journal.* It will be reprinted in the *Occupational Health Review.*

I am happy about the "Counselling Guide" as it tidies up our concept of this function which has caused concern for many nurses in the field of occupational health nursing.

MILDRED I. WALKER, Ontario.

Dear Editor:

In reading through my copy of the December issue of *The Canadian Nurse,* I noticed the article concerning our festival of Chanukah on page 1099.

There is an error in the article in reference to the date of Chanukah. This year the festival fell on the 14th of December or the eve of December 13th when we lighted the first candle.

The error arose because all of our holidays and festivals are dated according to the Hebrew calendar.

The festival of Chanukah is celebrated each year on the 25th of Kisler. Because of the shorter months and more frequent leap years in our calendar, each year Chanukah falls on different dates on the English calendar.

ROSLYN SNYDER, Ontario.

Dear Editor:

I am a public health nurse from Ceylon who has come on a WHO Fellowship to attend the School of Nursing, University of Toronto for a course in nursing education.

Although I have been reading magazines for people in different walks of life, I have never had the opportunity of reading such a valuable one as *The Canadian Nurse.*

It provides the student nurse with current medical knowledge, and enlightens readers who are interested in health matters with your invaluable articles supplied by the leaders of the health team.

I take pleasure in telling you that I appreciate the *Journal* as a great national and international service. I shall not forget to put my name on your mailing list for this magazine before I leave for Ceylon.

Congratulations and good luck!

J. T. de Siloe, Ontario.

Dear Editor:

1961 marks the Centennial of St. Joseph's Hospital, Guelph, Ontario, and preparations are now being made for the festivities to be held on September 30th, October 1st and 2nd.

We are endeavoring to contact as many of our Alumnae members as possible in order that we may keep them informed of our plans for this special occasion. We have some addresses, but many are outdated, and many names have been changed. Thus we have great difficulty in reaching many of our members. If you would publish this letter in *The Canadian Nurse* we feel we will be able to get in touch with a great number of our members.

Georgina Millar, Convener, Addresses Committee, School of Nursing, St. Joseph's Hospital, Guelph, Ontario.

Dear Editor:

I have appreciated many of the articles in the *Journal*, most practical and helpful in these days of changing ideas and problems . . . We all look eagerly to the *Journal* for help in dealing with day-to-day problems.

Beryl Jones, Manitoba.

Dear Editor:

This is to let you know how much I enjoy receiving my copy of *The Canadian Nurse*. I have been away from active nursing and I find the articles on drugs, heart surgery, etc., very enlightening. Keep up the good work.

Glenys M. J. Cutler, Ontario

Dear Editor:

Please send me another copy of the November issue as I wish to send it to a classmate of mine in Australia who, I am sure would be extremely interested in the information on nutrition. I would send my copy but would like to keep it, like the others, for reference.

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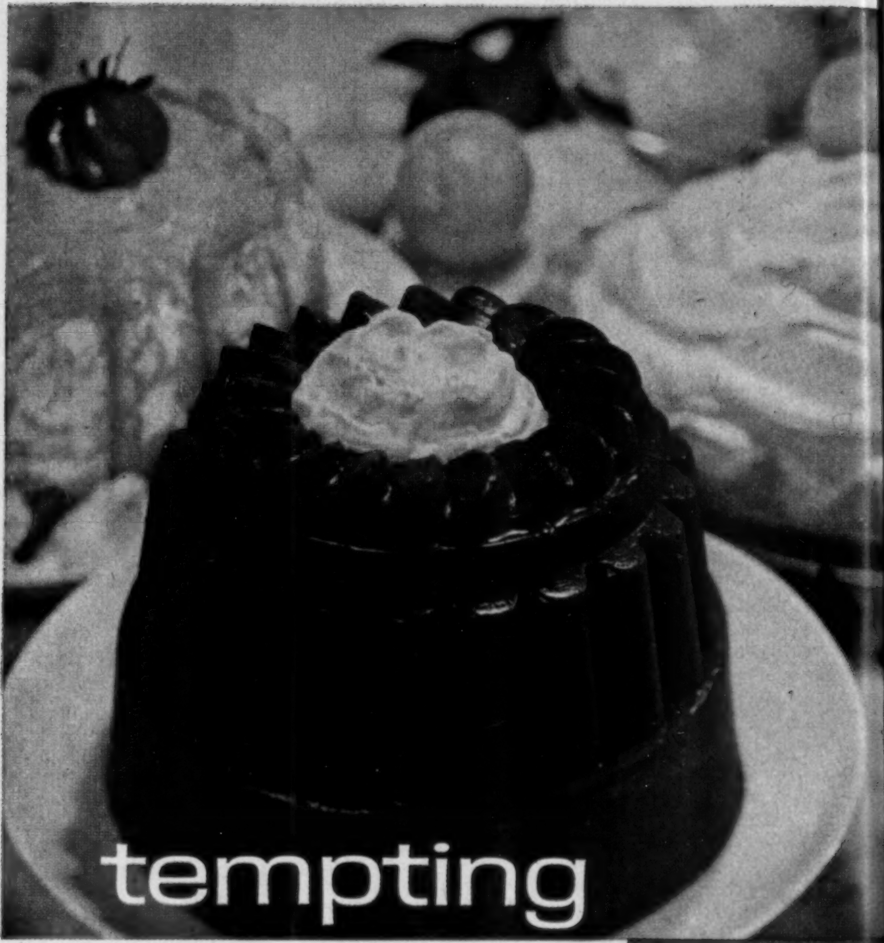

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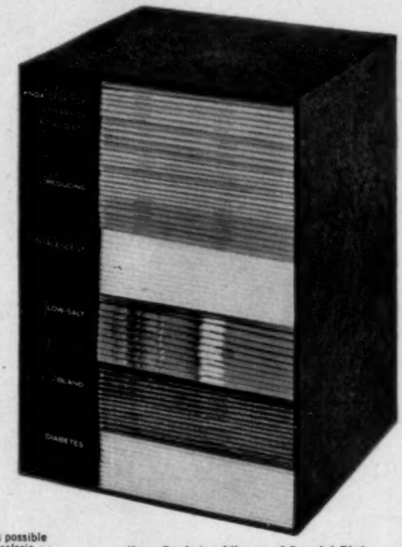
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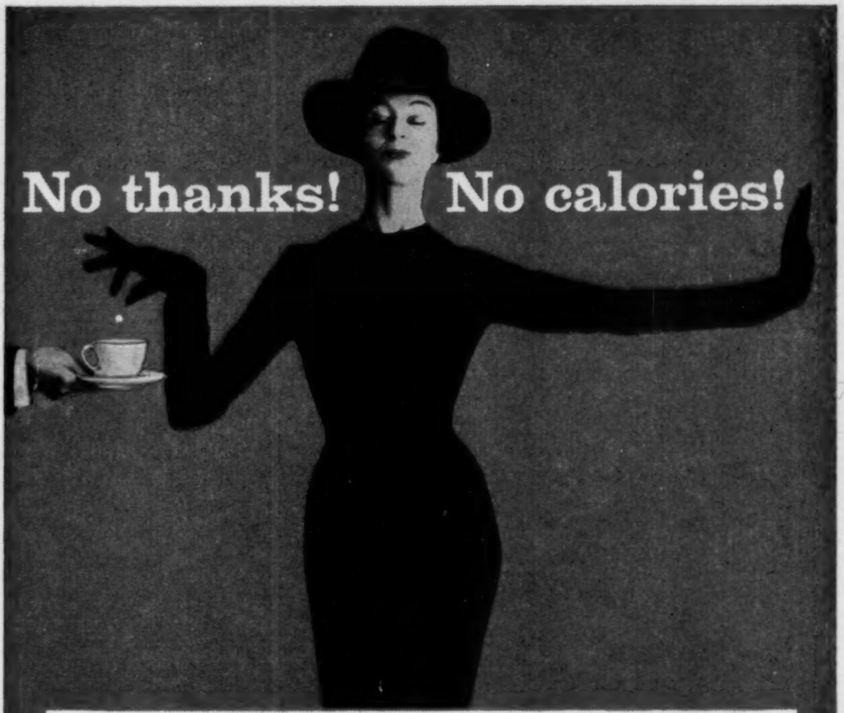
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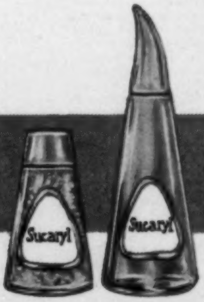

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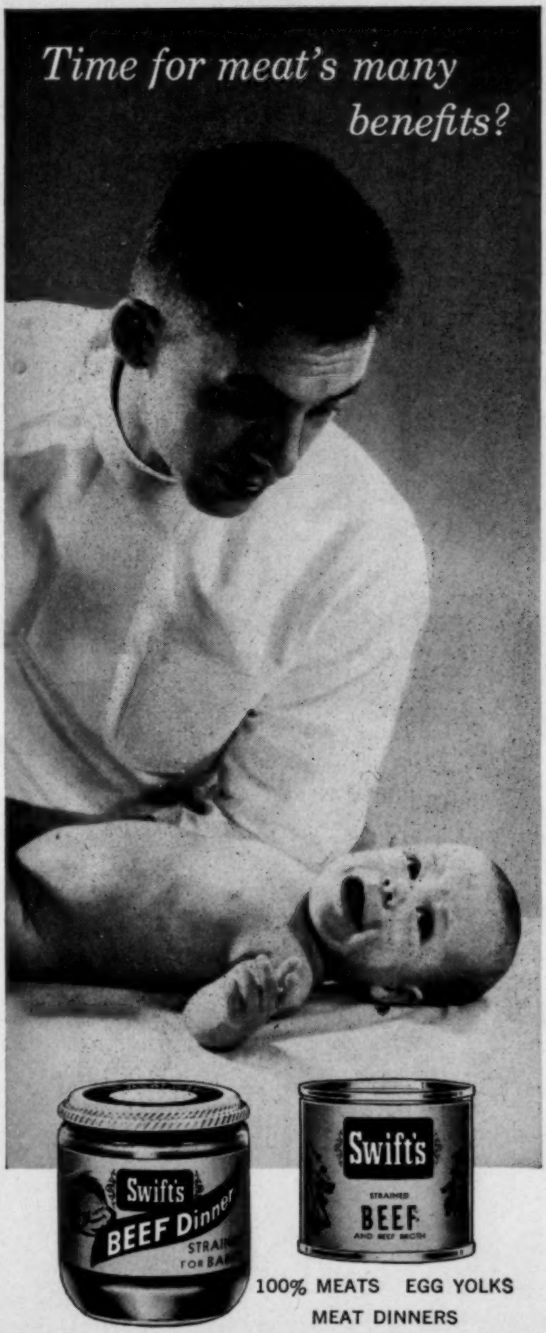
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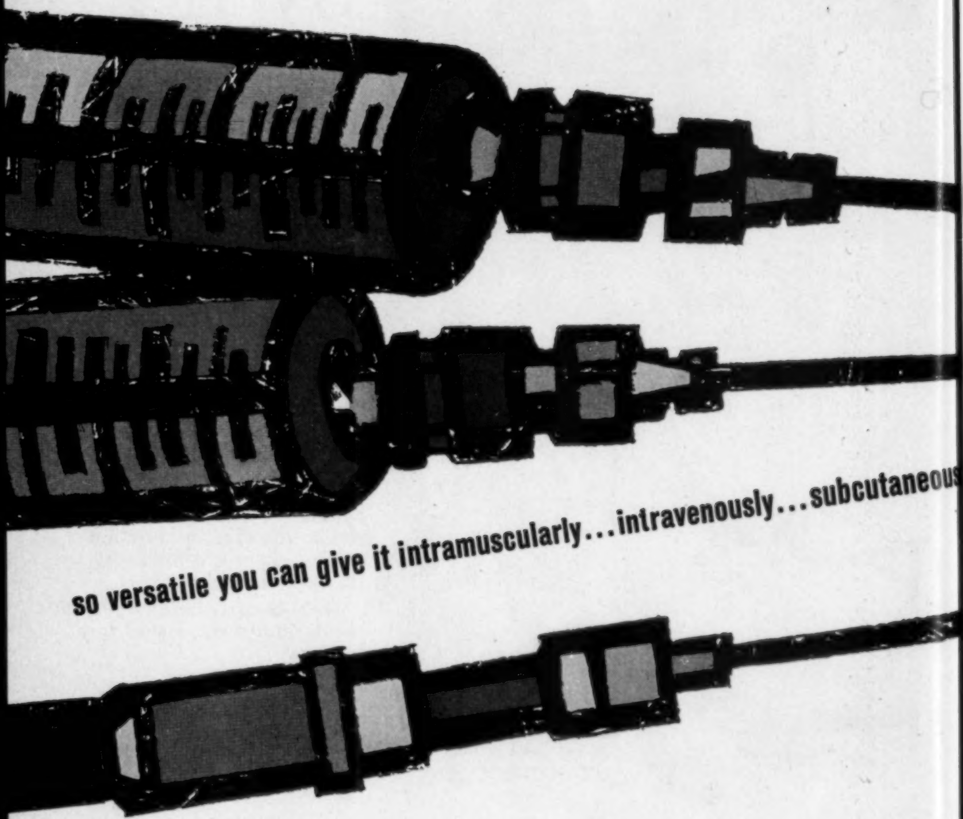
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Medical literature available on request.

References: (1) Ross, S.; Puig, J. R., & Zaremba, E. A.: *Antibiotics Annual* 5:803, 1958. (2) McCrumb, F. R., Jr.; Snyder, M. J., & Hicken, W. J.: *ibid.*, p. 837. (3) Payne, H. M., & Hackney, R. L., Jr.: *ibid.*, p. 821.

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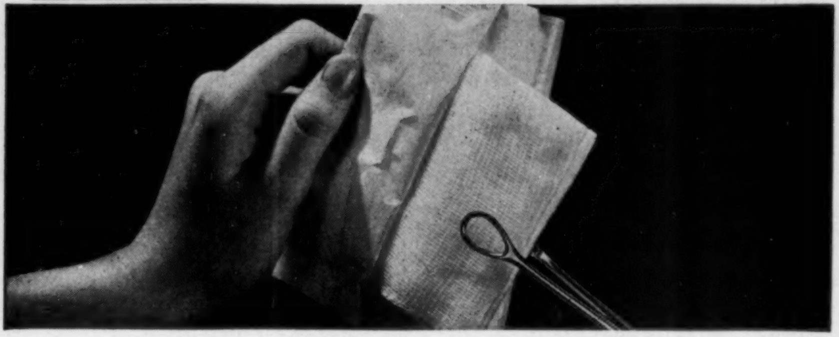

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1. Burnett, W. E.: *Program for Prevention & Eradication of Staphylococcic Infections*, J.A.M.A. 166: 1183-84 (March 8) 1958. 2. Adams, R.: *Prevention of Infections in Hospitals*, Am. J. Nurs. 58:344-48 (March 1958). 3. *Medical Authorities Recommend Ways to Control Infections*, Mod. Hospital 90: March 1958, 51-54.

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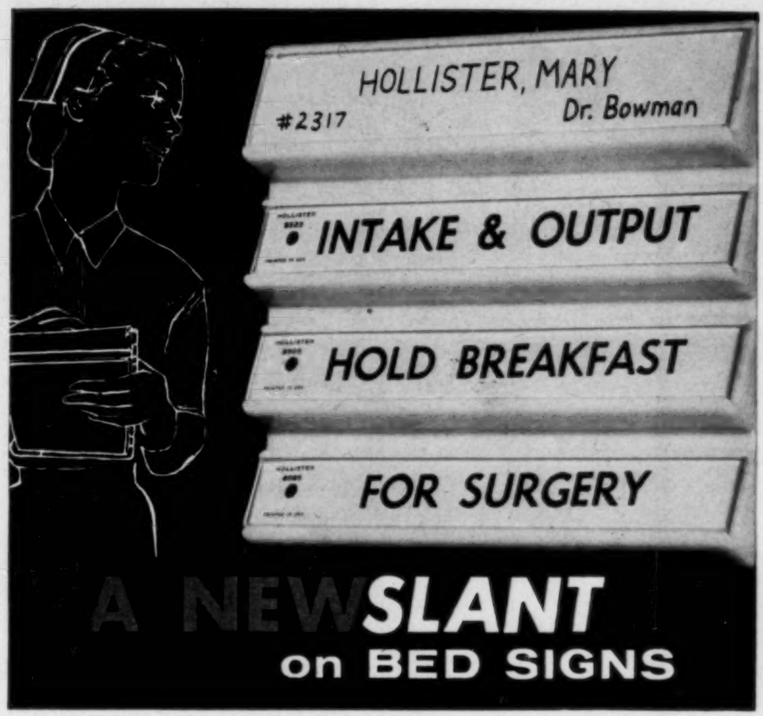
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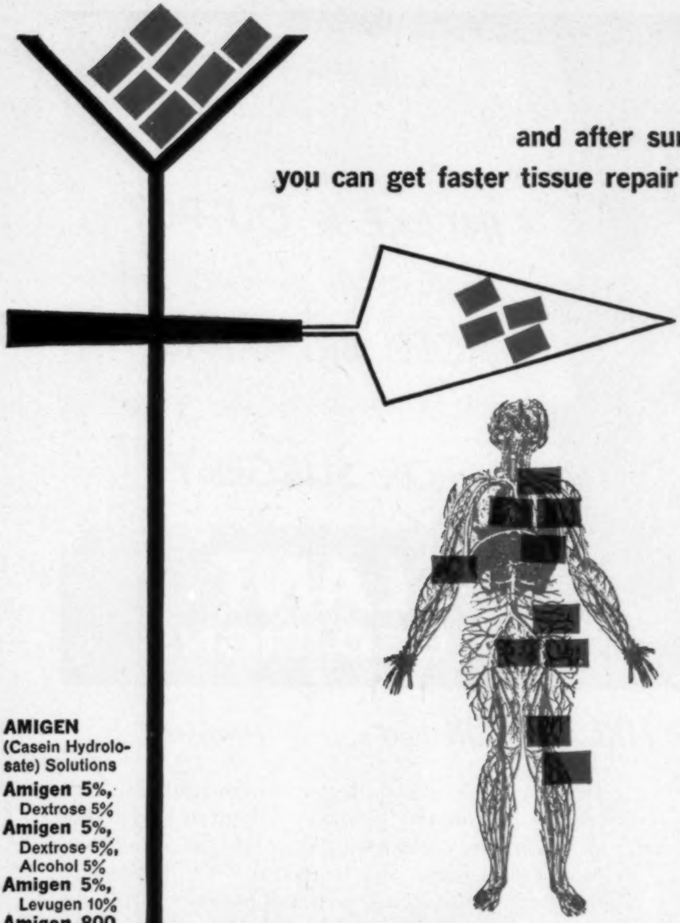

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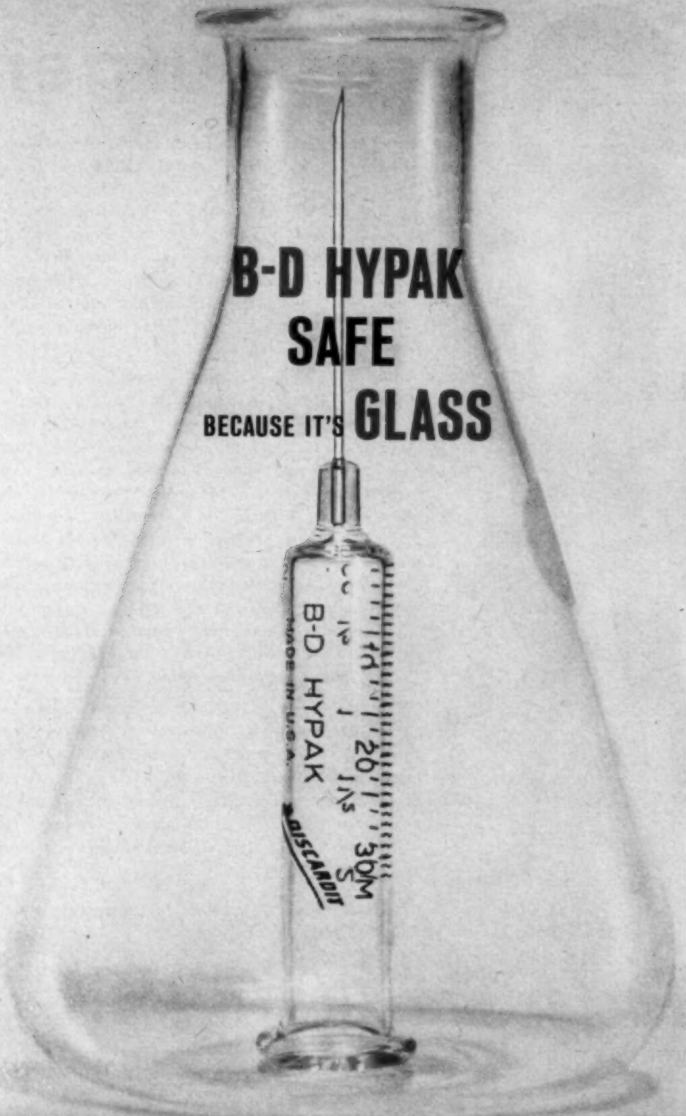
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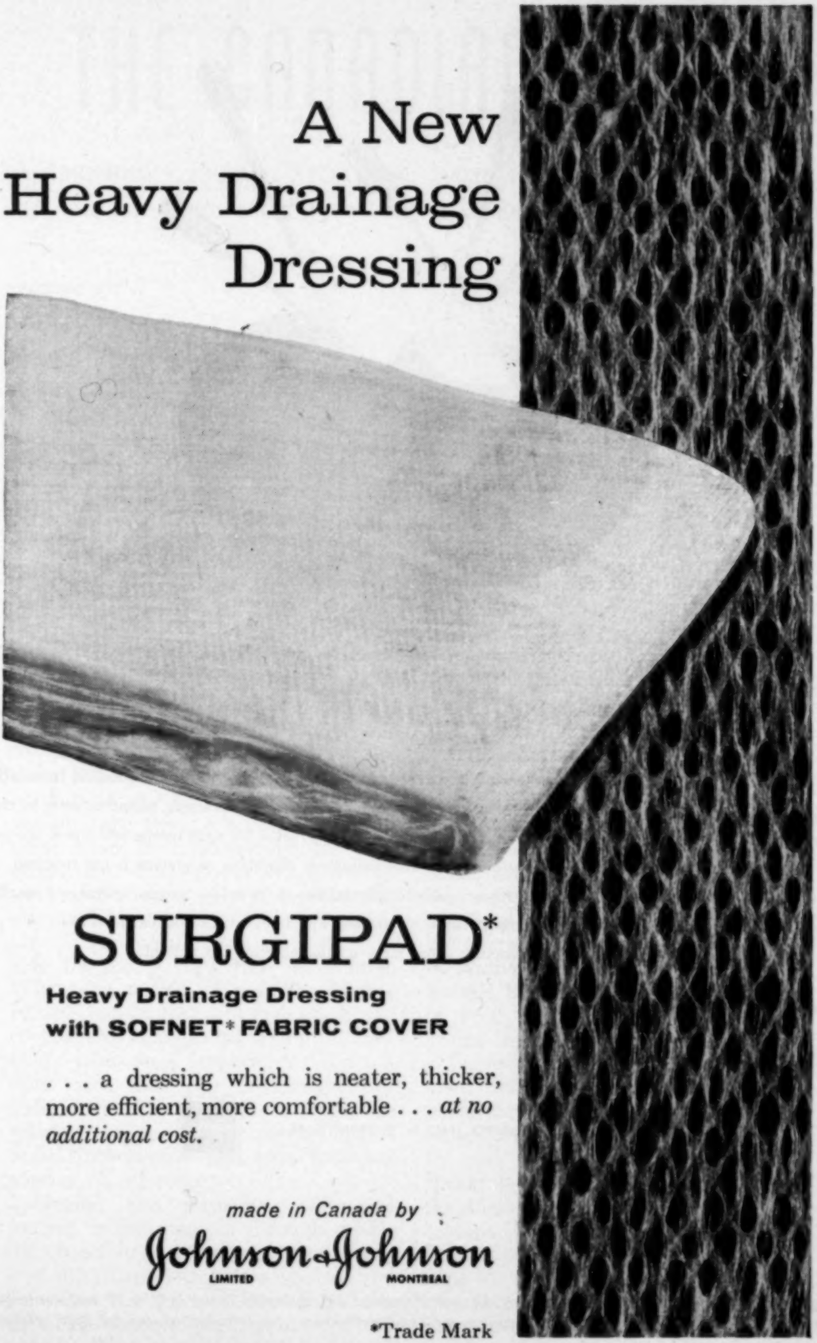

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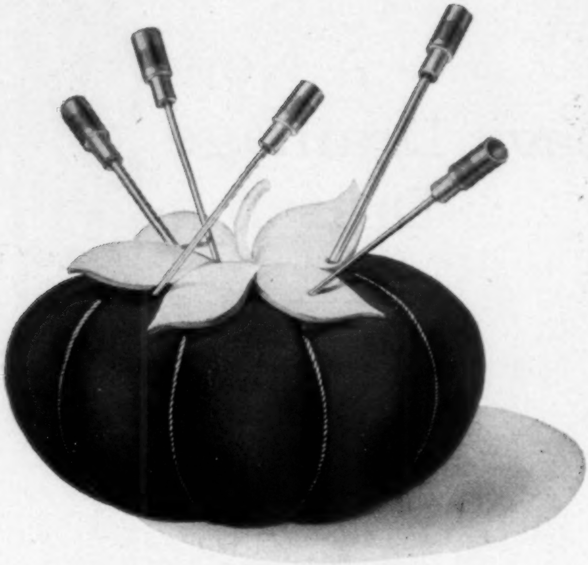

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A MONTHLY JOURNAL FOR THE NURSES OF CANADA PUBLISHED
IN ENGLISH AND FRENCH BY THE CANADIAN NURSES' ASSOCIATION

VOLUME 57 NUMBER 3

MONTREAL, MARCH 1961

KEEPING POSTED

THE ADVANCES in the various specialties of medicine and the paramedical services occur so rapidly that it becomes an almost impossible task for nurses to keep completely up-to-date. We feel a responsibility and a need to do so since, as members of the patient care team, we realize that we must have such knowledge to work effectively. For the average nurse, reading a wide variety of medical and nursing journals is not always possible. Either the journals are not available or the nurse's time is limited. What she wants, if possible, is one reliable source that will give her broad coverage of changes occurring in other fields with their implications for patient care. She can then make her individual choice of those areas in which she feels that she requires additional information and look to other sources of reference.

Ideally, the nurse's professional journal is the medium through which the objective of providing comprehensive information can be attained. For Canadian nurses, our *Journal* is in a particularly sound position to offer this service. With the help of the editorial adviser in each province, we can draw upon the knowledge of experts among nurses, doctors, nutritionists, etc. Since the *Journal* reaches the registered nurses of every province it can obviously be a most effective means for ensuring an informed group of professional workers. There is a double obligation implied here. The *Journal* undertakes the obligation of providing the information that will meet the needs of nurses generally, whatever their specific areas of interest. The individual nurse has an obligation to herself, her patients and her profession to keep informed through the pages of her *Journal* and other periodicals.

Occasionally, a reader may comment that articles by doctors have no place in a publication for nurses. The same opinion has even been expressed by one or two doctors. Generally speaking, nurses *want* the viewpoint of the doctors and *request* it, for sensible reasons. They want to understand as fully as possible what is being or can be done for the patient within the various specialties; what new techniques have been developed; what is visualized for the future as the result of research.

This is quite in keeping with the present philosophy of comprehensive nursing care. It is true that much of what the nurse learns of the work of other professional team members may have little value in the way of *practical* application. However, she uses this information to see how she fits into the total program of patient care; to revise existing methods of nursing care; to comprehend how her work can complement that of the other team members; to interpret to other members of the team, to the patient and to his family.

For those who feel that a nursing journal should be "for nurses only"; that information, especially medical, can always be derived from textbooks, there are arguments to the contrary. What of the many small, rural hospitals; the nurses in the Red Cross outpost hospitals; the nurses in the isolated health units; the married nurses with a family and home to care for? The hospital budget is limited and textbooks are rapidly outdated; medical library facilities may be nonexistent. The average nurse keeps the textbooks she collected as a student but how many of them are medical texts and how often does she purchase new editions to replace old ones? Most of us, no matter where we work, would be prepared to admit that we are very dependent on periodicals for our information.

There is an advantage in having the experts of other professions write specifically for a nurse audience. The individual author directs his material to the interests of the specialized group of readers and avoids the detail that could only have value for another member of his own profession. This particular issue of *The Canadian Nurse* will illustrate the point. It is devoted almost exclusively to the field of ophthalmology, and reviews, in a general way, developments occurring within it rather than concentrating on one specific condition. Consequently, each nurse will gain an idea of what has been happening recently in the care of patients with eye conditions in addition to receiving a refresher course in her general knowledge of the eye. The series includes several articles by doctors, written especially for us as nurses. In each instance the authors have touched upon the aspects of greatest significance to us.

Similar series of articles will be presented in subsequent issues in relation to areas where it is felt that greater understanding is required to foster cooperation or where new methods and concepts are coming rapidly into use. How well we keep ourselves posted on what is happening within our own profession, as well as in other professions, can determine the comprehensiveness of our nursing care.

J. E. M.

Coming!

in APRIL 1961

Guest Editor — Miss Ella M. Howard,
President,
Registered Nurses' Association of Ontario
Schiffman — Neurological Evaluation of the Newborn
Holman — Erythroblastosis Fetalis
Dantow — The Preschool Years
Anderson — Management of the Diabetic Child
Coburn — Adolescence
Donohoe — Impact of Hospital Insurance on Patient Care
Johnson — Preparedness Pays (the explosion in Windsor, Ont.)

Plus additional material

The greatest problem children have in learning good manners is observing them.

Well, if I called the wrong number why did you answer the phone?—JAMES THURBER

The Eye and its Protective Mechanism

M. R. Marshall, M.D.

John stood on the porch looking through the yellowing birch trees towards the lake and the snow-capped mountains beyond. A light breeze ruffled the water and golden sunlight danced on every ripple. Below him a humming bird flashed across the lawn and hovered over a deep red rose.

John sighed contentedly, "What a beautiful world!"

Vision is the most important of our senses. We see with our eyes. The eyeball is an outgrowth of the brain and is connected to it by means of the optic nerve. The eye is the window through which the brain sees the world. It has been said that the eye mirrors the workings of the brain. Actually we see part of the brain when we look into the eye at the optic nerve.

The eye is often likened to a camera. In fact, it is far superior to it. It has its own automatic light shutter (the eyelids); its own variable light regulating aperture (the pupil); its own instantaneous focusing apparatus (the cornea, lens and ciliary body); its own permanent multicolored self-developing film (the retina), and its own smoothly acting mechanism for sighting in all directions (the four rectus and two oblique muscles). Further, and more important still, through the connection with the brain (optic nerve), the pictures are interpreted.

This fascinating and well-coordinated mechanism makes vision appear a simple process. In reality, it is one of the most complex functions of the body. Rays of light from an object penetrate the eye through the cornea, aqueous humor, lens and vitreous humor and fall on the retina on which an image of the object is formed. The photochemical and photoelectric impulses thus started in the retina are transmitted through the optic nerve and visual tract to the posterior half of the brain. It is here that the impulses are interpreted; that the object is seen.

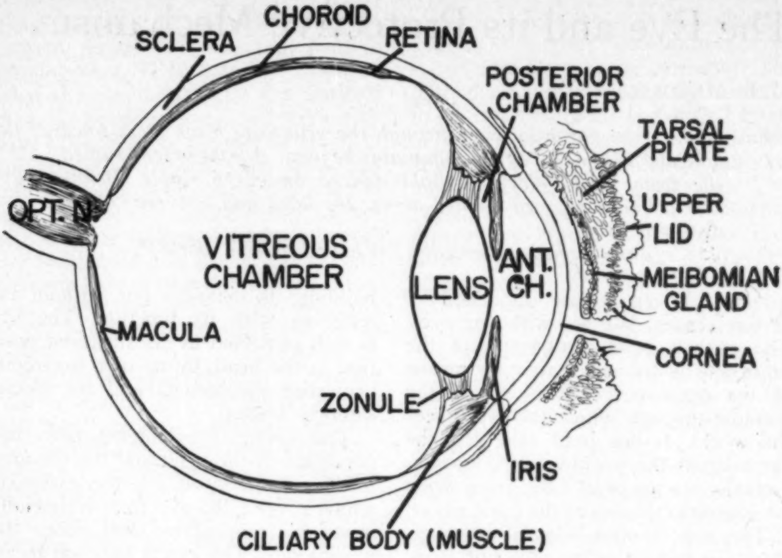
Because the eye is a very important organ, Nature has been lavish in building its defences but without interfering with its function. The eye is well protected by its sheltered position in the head, by its own ingenious protective mechanism and its special sanitary system.

The strong, overhanging bony upper ledge of the orbit and the elevated bridge of the nose are the ramparts which protect the eye from unfriendly invasion from above and from the medial side. The eye is exposed to attacks from in front, from below and from the outer side. This apparent weakness, however, is real protection in disguise. The low ramparts or lack of ramparts allow the eye to have a wide sweep of the fields from which the enemy may approach. Thus, we have an early alarm system that warns and protects not only the eye itself but, through it, the whole body.

The eyebrow, eyelids and eyelashes are parts of the protective mechanism. In many instances they act as the front line of defence. They impede and often prevent the passage of beads of perspiration, crawling insects, dust, poisonous gases, destructive fluids, flames, flying foreign bodies, and so forth, from entering the eye. Plucking the eyebrows, application of cosmetics to the eyelids and eyelashes lower the efficiency of the natural defences of the eye, to a certain extent at least.

In addition to the eyelashes, each eyelid has a muscle (levator) which opens the eye; a muscle (orbicularis) which closes the eye; a layer of hard connective tissue (the tarsal plate) which provides firmness, and a series of glands (Meibomian) from which secretions flow to the free border of the lid. All of these protect the eye and help in its defences. At the slightest sound or movement — real or imaginary — which may indicate danger, the eyelids close instantly.

Dr. Marshall is connected with the Departments of Ophthalmology, University of Alberta, and University of Alberta Hospital, Edmonton.



Cross section of eyeball and eyelid

The lacrimal gland, situated in the upper, outer corner of the orbit, is constantly secreting tears. These possess limited nutrient and antiseptic properties. There are other smaller lacrimal glands and mucous glands in the conjunctiva lining the anterior part of the sclera. The secretions from all of these glands are spread across the anterior surface of the eye by the normal process of blinking. The cornea and conjunctiva are thus kept moist. This automatic sprinkler system keeps the space between the eyelids and the front of the eye — the conjunctival sac — clean, washes away loose foreign particles and dust and, to a remarkable degree, neutralizes the action of the ever-present bacteria.

Under ordinary circumstances, tears are secreted in minute but sufficient quantity. They are dispersed by evaporation. In the presence of danger, however, the secretion of tears increases rapidly. This brought about by a fascinating automatic alarm system. Numerous highly sensitive nerve endings are present in the cornea, conjunctiva and margins of the eyelids. When these structures are invaded by infectious organisms, inanimate foreign bodies, insects, dust, smoke and very cold air, the sensory nerves react quickly and initiate pain impulses which result in excessive lacrimation. The eye is thus cleared of noxious substances and its temperature is maintained within normal limits.

In addition to its secretory function, the lacrimal apparatus drains excess tears to a limited extent. This is accomplished through the drainage portion of the lacrimal apparatus, which consists of the canaliculi, lacrimal sac and nasolacrimal duct. It is interesting to note that the lacrimal gland is situated at the outer corner of the orbit and the drainage system at the inner corner. This is an effective arrangement. The tears flow from the temporal side towards the nose into which the distal end of the drainage channel opens.

The tear gland also secretes in response to psychic stimuli. This is attested to by the sniffing and blowing of the nose which is observed on joyful or sad occasions. It has been said that psychic tears are a luxury which help to differentiate man from the lower animals.

Under ordinary circumstances the eye does not require special care or attention. The routine use of washes, drops or ointments is not only unnecessary but may interfere with the efficacy of the normal defences of the eye and may also create a sense of false security. All the average man needs to do is to keep his eyes open when he is awake, shut them when he is asleep and seek immediate assistance when the danger signals are unusual.

John looked again at the sky and the trees and flowers. The humming bird had disappeared but the memory of its iridescent, shimmering wings was vivid. "Have you ever thought," he said to his wife as he went in to breakfast "how much of our life is spent in using our eyes? Let us guard them with care."

GLASSES AND SQUINT

D. T. R. Hassard, M.D. *and* M. R. Marshall, M.D.

The sense of sight is indeed the highest bodily privilege, the purest physical pleasure, which man has derived from his Creator. Sydney Smith.

Refraction

How do we see? This is a difficult question to answer because vision is a very complex function. An object is seen when rays of light from it form an image on the retina after penetrating the eye through the cornea, aqueous, lens and vitreous. This sets up photochemical impulses which are transmitted via the optic nerve and optic tract to the brain. The impulses are received, interpreted and understood by the brain.

The cornea, aqueous, lens and vitreous are called the refractive media or dioptric system of the eye. These media divert or deflect the rays of light from their previous course. The rays are made to converge, that is, they are bent towards each other and come together at a point called the *focus*.

Light rays coming from an object at least six metres (20 feet) away are considered to be parallel. When parallel rays penetrate an eye of normal size and shape, they automatically come to a sharp focus on the retina. This means that to see a distant object (six metres or farther away) clearly the normal eye does not have to make any effort. It does not have to bring into play its ciliary muscle — the muscle of accommodation.

On the other hand, light rays coming from a near object (closer than six metres) are divergent rays. When these rays pass through the dioptric system of the eye, they converge to form an indistinct image of the object on the retina. Then they come to a focus behind the retina. The nearer the object is to the eye the further back will be its point of sharp focus. This difficulty is overcome by "accommodation." Essentially, accommodation means an increase in the converging power of the refractive media of the eye. This is accomplished by altering the shape of the lens, and making it more spherical. The change is brought about by contraction of the ciliary muscle which causes relaxation of the zonule and allows the elastic lens to become more spherical. The more spherical the lens becomes the greater its power becomes. This is the same thing as saying that the lens is able to cause greater convergence of the rays of light as they pass through it.

Briefly, an eye of normal size and shape does not have to make any effort to see *distant* objects clearly. It only has to accommodate within physiological limits to see *near* objects clearly. Such an eye — called an emmetropic eye — sees comfortably because it has no refractive error.

Causes of Refractive Error

It is a well-known biological fact that few eyes are truly perfect. Most eyes have a refractive error caused by abnormalities in the length of the eye,

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Dr. Hassard and Dr. Marshall are associated with the Department of Ophthalmology, University of Alberta Hospital, Edmonton.

in the shape of the lens or in the shape of the cornea. The most common ocular disturbance, then, is a refractive error. The eye tries to overcome this error in several ways, including excessive use of the muscle of accommodation. This effort, which is beyond the physiological limits, gives rise to one or more of a long list of symptoms and signs.

An eye which is shorter (smaller) than the emmetropic eye is called longsighted or hypermetropic. An eye which is longer (larger) is called shortsighted or myopic. An eye with irregularity in the shape of the cornea or lens is said to be astigmatic. Such abnormalities need be only very small to lead to a refractive error.

Corrective Measures

The only way to correct a refractive error is by wearing appropriate glasses which will aid the dioptric system of the eye in bringing the rays of light coming from an object to a sharp focus on the retina. It may be clinically helpful to say that a person has a refractive error when he is in need of glasses. Convex or plus lenses are prescribed for longsightedness; concave or minus lenses for shortsightedness; plus or minus cylindrical lenses for astigmatism and plus lenses for presbyopia. Convex or plus lenses cause the rays of light to converge. Concave or minus lenses cause the rays of light to diverge.

The need for glasses may or may not be apparent. The refractive error may be manifest or it may be entirely or partly latent. It would, therefore, be wrong to assume that an individual who is able to read the *normal line* on the vision-testing chart with either eye does not require glasses, or that the symptoms with which he presents himself to his physician may not be due to the need for glasses. The symptoms may be any one or more of the following:

> Headache, blurred vision, eye-ache, eye-fatigue, inability to concentrate, falling asleep while reading, lack of attention at school, backwardness in reading and writing, lack of interest in out-of-door sports and other similar activities, various nervous symptoms such as blinking and insomnia, blepharitis, chronic conjunctivitis, styes, chalazia, burning of the eyes, sensation of grit in the eyes, itchiness, watering of the eyes, etcetera.

These signs and symptoms are often described as "eye-strain," a term which frightens many people. In actual fact, it is not possible to strain an eye or any part of it.

Latent or Masked Errors

It is worth repeating and even emphasizing that a refractive error may be masked by the excessive use of the muscle of accommodation. It is this constant effort by the ciliary muscle, an involuntary muscle, which gives rise to the long list of signs and symptoms mentioned above. The most effective way of measuring a latent refractive error completely is by the local use of cycloplegics. These are drugs that cause relaxation of the ciliary muscle and dilatation of the pupil. With the use of a cycloplegic it becomes possible to measure the refractive error objectively. This is especially helpful in the examination of children of preschool age. It should be noted that latent refractive errors are encountered mainly in longsighted individuals below middle-age.

The question of latent refractive errors should always be kept in mind when carrying out routine examinations of school children. It is not advisable to report that a child's eyes are "normal' simply because he can read the normal line or better on the vision-testing chart. Routine examinations are already accomplishing much by drawing attention to cases in which the visual acuity is less than the "normal." Even more is accomplished when the signs and symptoms caused by this particular condition are kept in mind.

Use of Glasses

It has already been pointed out that refractive errors — longsightedness, shortsightedness, astigmatism — are due to deviations from the normal in the size and shape of the eye. They are usually hereditary, physical defects. They are not usually due to pathological processes. These defects are taken care of by glasses. It should be obvious that glasses do not *cure* anything for there is nothing to cure. All that the glasses do is to help the individual with a refractive error to see better or to see more comfortably or both and thus relieve him of unpleasant symptoms. Glasses, when required, should really be worn at all times. The size and shape of the eye does not alter whether looking at distant or near objects. On the other hand, eyes are not damaged even if glasses are not worn when the need is great. It should also be equally obvious that *eye exercises of any form do not alter and cannot alter the size and shape of the eye.*

Glasses, of course, must be changed if the size and shape of the eye changes with age. A longsighted or small eye may become larger or less longsighted. If it continues to grow, it may become normal or even shortsighted. A shortsighted or large eye will always be shortsighted, for it cannot get smaller. It may become more shortsighted if it continues to grow larger. In general, glasses should be changed as the need arises, not at any given interval of time.

Most individuals are born longsighted, that is, with eyes that are too short. The hypermetropic child is often able to overcome this defect by the excessive use of the ciliary muscle (accommodation). The myopic child does not use the ciliary muscle, for this would not help his vision. This explains why the hypermetrope has discomfort although he sees well, and why the myope has no discomfort other than blurred distance vision.

All individuals, sooner or later, lose the power of accommodation. This is due to the loss of elasticity of the human lens, a process which really starts at birth but the effects of which are not felt until the age of 40 to 50 years. This is known as presbyopia or "old sight." The presbyopic age is reached when the eyes are no longer able to do near work with comfort.

Briefly, the emmetropic or normal eye requires no glasses for distance vision. Longsighted (hypermetropic), shortsighted (myopic) and astigmatic eyes require glasses for clear, comfortable distance vision. All of these eyes require correction for clear, comfortable near vision when they reach the presbyopic age.

A presbyopic correction (reading glasses) may be prescribed as simple lenses which can only be used for near work, or in combination with the distance correction (bifocal lenses), or even in combination with both distance and intermediate corrections (trifocal lenses). Reading glasses should be changed as the need arises, not at any given interval of time. Usually, the presbyopic correction requires changing every three years between the ages of 45 and 60. In any case, periodic examination of the eyes at that time is advisable.

It should perhaps be pointed out that *loss of elasticity* of the lens must not be confused with *loss of transparency* of the lens (cataract). To restore vision due to loss of elasticity of the lens, glasses have to be worn. To restore vision due to loss of transparency of the lens, the cataract has to be removed and then glasses must be worn.

When prescribing glasses the degree of vision (visual acuity) is, of course, always tested. A brief reference to the method of testing for visual acuity and recording it may not be out of place. Visual acuity is measured with a vision-testing chart (Snellen chart). It is placed at a distance of 6 metres from the individual. The chart consists of several lines of letters (numbers or other symbols). Each line subtends an angle of five minutes at stated distances. The usual distances are 60, 30, 20, 15, 12, 10, 7.5, 6 and 5 metres. The vision of each eye is measured separately and is recorded as a fraction. The numerator of the fraction indicates the distance the eye is from the chart, usually 6 metres (20 feet). The denominator is the distance at which the normal eye reads the letters. For example, vision of 6/6 (or 20/20) means that at a distance of 6 metres (20 feet) the eye which is being tested is able to read the letters which the normal eye reads at 6 metres (20 feet). Vision of 6/10 means that at a distance of 6 metres the eye which is being tested can only read the letters which the normal eye reads at 10 metres. It is obvious that the fraction used in recording visual acuity is not a true fraction. Vision of 6/12, for example, represents visual efficiency of about 84 per cent and not 50 per cent.

Squint

All that has been discussed previously is related to the vision of the individual eye. But the eye is a paired organ. It is not only interesting but important to study, at least briefly, vision as it is accomplished by both eyes simultaneously, binocular vision.

To see or fix an object well in any direction of gaze by both eyes simultaneously requires: a. that the eyes be moved or be directed towards the object; b. that a clear image of the object be formed on corresponding parts of the two retinas — the fovea of each eye. The apparently simple but well-coordinated movements of the eyes are carried out by the action of 12 extrinsic ocular muscles, four rectus and two oblique muscles in each eye. The ability of each eye to fix on an object with corresponding points in each retina depends on a faculty of the brain known as "fusion."

Anything that throws the extrinsic muscles out of balance or interferes with fusion power will cause double vision (diplopia), which is intolerable. Under such circumstances, the only alternative left to the eyes is to give up the effort to work together. Each eye looks in a different direction. When this happens *squint* or *strabismus* is said to be present.

If a squint is due to an organic lesion in one or more of the extrinsic muscles, it is called a paralytic squint. Such a lesion may be due to traumatic injury to a muscle or to its nerve supply or it may be due to congenital or acquired disease. The angle of deviation varies in accordance with the direction of gaze. The angle is greatest when the eyes turn in the direction of the paralyzed muscle.

If there is no muscle paralysis, the squint is called concomitant (or nonparalytic) squint. This is by far the more common type. The deviation may be due among other factors to excessive or defective innervation of paired muscles; to faulty fusion faculty; to hereditary tendency or to uncorrected refractive errors. In this type of squint the deviation is constant in all directions of gaze, that is, the angle between the visual axes of the two eyes remains the same at all times.

Concomitant squint may be convergent (cross-eyes), if the squinting eye turns in; divergent (walleyes), if the squinting eye turns out; vertical, if one eye is higher than the other and alternating, if either eye is able to fix an object while the other deviates.

Concomitant squint usually appears between the ages of six months and six years. It may be periodic or intermittent at first but if it remains untreated it will probably become constant. Because of its early onset, diplopia is not a presenting symptom. Children overcome the discomfort by suppressing the vision of one eye. The suppression soon leads to loss of vision due to disuse.

Commonest Cause of Squint

A very common cause of the most usual type of squint — concomitant convergent squint — is hypermetropia. There may be precipitating causes such as, fatigue, general debility, infectious diseases, fright and environmental disturbances.

Normally, when fixing an object which is six metres away or farther, the two eyes are parallel to each other. Again normally, when fixing an object which is nearer than six metres (as when reading), the eyes have to converge towards each other. Farsighted eyes have to use an unusual amount of accommodation to see near objects clearly. For any given distance, the degree of convergence is always the same but the amount of accommodation may vary in accordance with the degree of farsightedness. An effort is required to maintain the proper balance between convergence and accommodation. Sometimes the effort is so great that it gives rise to much discomfort. When this point is reached the eyes cease working together. This is a frequent cause of squint. At first the squint may be latent or periodic. If it remains untreated it usually becomes constant.

Treatment of Squint

A squint, whether it is periodic or constant, divergent, convergent, vertical or alternating, should not be neglected. The sooner the child is examined and treated, the better are the chances of obtaining a satisfactory cosmetic and functional result. Grandmother's suggestion that "the child will outgrow" the defect should be completely ignored. Delay in instituting treatment may cause permanent loss of vision in the squinting or nonfixing eye and often influences the cosmetic result adversely. In addition, for psychological reasons the child's eyes should be straightened long before he starts school. Early treatment depends on the attitude of the parents, family physician, pediatrician and nurse. An ophthalmologist cannot see cases of squint soon enough. If it is present or suspected after the age of six months, the child should be taken or referred to an ophthalmologist.

Treatment of squint depends on its nature and cause. It may consist of correction with glasses of any appreciable refractive error; occlusion of the fixing eye to prevent loss of vision in the squinting eye; orthoptic exercises by a trained technician to develop fusion, and finally, surgical treatment. When required, glasses should be worn constantly. If an occluder is indicated, the "fixing" or "straight" eye must be *completely* occluded. Orthoptics (eye exercises), when prescribed by an ophthalmologist, should be carried out and directed by a well-trained, sympathetic technician. The ill effects of squint can be prevented or successfully treated by timely attention.

Diseases of the Eyelids and Lacrimal Apparatus

J. Winston Duggan, M.D.

The basic anatomy and physiology of the structures about the eyes is of particular importance in understanding the clinical conditions which effect these areas.

The eyelids are mobile, protective, tissue curtains which are placed in front of the eyeballs. They are developed from folds of skin. From the front backwards they consist of a layer of fine skin, loose connective tissue, muscle, tarsal plate, fascia and conjunctiva. They contain certain glands, blood vessels, lymphatics and nerves. The eyelashes are attached to the margins. The skin itself is thin and delicate and is joined to the underlying muscles by loose connective tissue. The two muscles of greatest importance are the levator palpebrae superioris and the orbicularis oculi. The first muscle functions to elevate the upper lid; the second one closes the lids. The tarsal plate or tarsus is a thin, cartilaginous structure which constitutes the skeleton of the lids thus providing much of their form and firmness. Within the substance of the tarsus, disposed in parallel rows, are the Meibomian or tarsal glands which empty their secretion on the lid margin. On the under surface of the tarsal plate is the palpebral portion of the conjunctiva. This is continuous with the other anatomic portions of the conjunctiva to provide what is known as the conjunctival sac.

The eyelids serve to protect the globes from external injury, foreign bodies, undue exposure and excess of light. They distribute the tears and secretions from the various glands, thus lubricating the eyeball and keeping the surface of the cornea moist and transparent.

Conditions Affecting the Eyelids

Certain pathologic changes in the position of the lids may occur. This may result in a situation that is dangerous to the integrity of the eyeball. Because of a spasm of the lid muscles or because of contracting scars in the conjunctiva, the lid margin may be inverted. This is known as *entropion.* With inversion of the lid margins, the

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Dr. Duggan is associated with the departments of ophthalmology, University of Alberta and the University of Alberta Hospital, Edmonton.

eyelashes come into contact with the cornea. If this condition is permitted to persist, continuous irritation of the corneal surface by the rough lashes will ultimately result in corneal erosion, ulceration and scarring. On the other hand, eversion or *ectropion* may occur. This may be due to scarring of the skin of the lids; to paralysis of the orbicularis muscle or loss of tone of the lid tissues which permits the lid margins to fall away from the globe. This is often seen in elderly people. Ectropion from any cause is associated with excess tearing and redness of the conjunctiva because of exposure of the surface of the eyeball to wind, dust and other irritants. In most cases the only satisfactory treatment for entropion or ectropion is some type of surgical procedure that is designed to restore the original position and function of the lids.

Certain changes in circulation in the lids may result in interesting clinical phenomena. The "black eye" is a common condition. It is due, generally, to a blunt blow in the region of the eye. Small blood vessels in the substance of the lid break, with extravasation of blood into the loose connective tissue between the skin and orbicularis muscle. A considerable amount of blood may collect and, because of the relative transparency of this skin, it can be easily seen as a dark blue area. Hemorrhage into the eyelids is common in fractures of the nose, and in basal skull fractures. Treatment is not particularly helpful, although hot saline compresses may speed up the absorption of the blood in this area.

Swelling of the lids or edema may be inflammatory or non-inflammatory in origin. Inflammatory swelling is usually associated with styes, acute chalazia, blepharitis, conjunctivitis, iritis, and orbital infections. Treatment is directed at the primary condition. Non-inflammatory swelling is usually associated with a systemic condition such as chronic heart or kidney disease, allergic states, thyroid disease, or infestation with parasitic worms, such as trichinosis.

Allergic inflammation and swelling of the eyelids are seen fairly frequently. They may be associated with the ingestion of foods, such as fresh fruit and vegetables, shellfish, nut or chocolates. Many drugs such as aspirin, atropine, barbiturates, digitalis, morphine, and antibiotics will produce an itchy, irritated swelling of the lids. Cosmetics are often at fault as well as some of the newer detergents. The outstanding clinical feature is the swelling and itchiness that appears whenever the patient comes in contact with the allergen. The treatment consists of avoiding such contact if the offending substance is known. If not, certain anti-allergic preparations are very helpful in relieving the discomfort.

Another distressing condition of the eyelids is marginal blepharitis. It is characterized by an inflammatory reaction along the lid margins at the base of the lashes. The patient notices that the skin of the lid margins is red and irritated and that numerous crusts accumulate at the base of the lashes. The condition is caused either by a chronic staphylococcal infection or by a yeast which produces a seborrheic condition of the scalp at the same time. Although treatment is very helpful in controlling the condition in many cases it is extremely difficult to actually cure it. Local application of antibiotic preparations, x-ray, or autogenous vaccines are useful in the staphylococcal type. In the type due to yeast it is essential that the scalp condition be cleared with some preparation such as Selsun before the lid margins can be controlled.

We now come to two inflammatory conditions of the lids which are perhaps the most common encountered in clinical practice. These are the stye or hordeolum and the tarsal cyst or chalazion. The stye is a pyogenic infection of glands at the base of the eyelashes which is very similar in nature to a tiny boil. Clinically, a small tender swelling is seen on the lid margin. The patient complains of extreme discomfort on movement of the eyelids. In more severe cases the entire lid becomes edematous and regional lymph nodes may become enlarged and tender. Local treatment with hot saline compresses and systemic use of antibiotics in the more severe cases will control the situation. The pustule either resolves or discharges on the lid margin.

The chalazion is essentially a retention cyst of the tarsal or Meibomian gland with little or no inflammatory changes in the overlying skin. The patient does not complain of pain in the lid. There is a firm nodular swelling that gradually increases in size. This swelling is situated in the substance of the lid rather than on the lid margin. The gradual onset without discomfort differentiates it from a stye. The only satisfactory treatment for chalazion is curettage of the contents. This is done under local anesthesia through the palpebral or undersurface of the eyelid. A small incision is made into the substance of the cyst and the cheese-like contents are curetted with a small scoop. Sutures are not usually necessary. An eyepad is applied for the remainder of the day. Warm saline compresses are helpful during the recovery period.

Certain pathologic changes in the movements of the eyelids are of some interest. Often the patient will complain of an annoying twitching or flickering usually in the muscle of the lower eyelid. This twitching or fibrillation may be associated with an uncorrected refractive error but, in my experience, it is more often due to general fatigue. A complete ocular examination to determine whether or not glasses are indicated is usually done. If these findings should be negative the patient is simply advised to get more rest. In persistent cases small doses of quinine are sometimes helpful.

If weakness or paralysis of the orbicularis muscle occurs for any reason, the ability of the eyelids to close and protect the eyes is impaired. Thus, any condition which affects the nerve supply or the lid muscles will result in laxness of the lids and exposure of the globe. Paralysis of the facial nerve from injury will result in irritation of the conjunctiva and cornea with severe visual impairment unless the condition is treated. It may be necessary to suture the eyelids together (tarsorrhaphy) until such time as the muscular function is recovered. It is remarkable how quickly the globe becomes damaged when the function of the lids is impaired.

Partial or complete paralysis of the levator of the upper lid causes a clinical condition known as blepharoptosis or, as it usually is called, ptosis. Due to the weakness of the levator, the upper lid hangs down over the globe. In severe impairment it hangs so low that the patient is unable to see beneath it. The great majority of these cases are congenital in origin although acquired ptosis is sometimes seen, particularly in myasthenia gravis. If the condition has persisted for any length of time the patient assumes a startling posture. Because the lids hang down over the globes, the patient tilts the head backward in order to peek out beneath the upper lid margins. Often this backward position of the head is quite extreme. In some cases of ptosis there are associated congenital anomalies of the eyeball movements as well. Usually the only satisfactory treatment of ptosis is some type of surgical procedure designed either to strengthen the levator, or to support the upper lid with the assistance of the superior rectus muscle or the frontalis muscle.

A great variety of benign tumors of the lid may occur. These include warts, dermoids, nevi, fibromas, hemangiomas, xanthomas and papillomas. Surgical excision is usually indicated. The most common malignant tumor of the lid is the epidermoid carcinoma or rodent ulcer. It is relatively common in this country particularly in persons who spend most of their lives outdoors and occurs mostly in older age groups. A small, indolent ulcer appears on or just below the lid margin. It usually has a weeping base with a firm, rolled margin. Gradually the ulceration extends in depth and area. If it is not adequately treated by surgery and radiation, it may result ultimately in a tremendous penetrating ulceration involving the skin of the lids, the orbit, the bones of the face and the underlying sinuses. Early surgical excision of the ulcerated area is usually the treatment of choice.

Wounds of the eyelids occur relatively commonly, particularly as the result of car accidents in which the patient is propelled through a windshield. Careful surgical repair of these lacerations is essential to maintain the important protective functions of the eyelids.

The Lacrimal System

Anatomically, the lacrimal system

consists essentially of a tear production apparatus (the lacrimal gland) together with a tear drainage system (the lacrimal puncta, canaliculi, sac and nasolacrimal duct). The lacrimal gland consists of a superior lobe, which lies in the lacrimal fossa within the orbit, and an inferior accessory portion which lies under the conjunctiva at the outer angle. Twelve excretory ducts empty the lacrimal secretion into the outer half of the upper fornix of the conjunctival sac. The lacrimal puncta are situated on the lid margins close to the inner angle of the eye. These openings are adjacent to the floor of the lacus lacrimalis. From these puncta, canaliculi (upper and lower) extend for approximately 10 millimeters, opening by a common punctum into the lacrimal sac. This sac lies in a bony fossa close to the base of the nose. From the lacrimal sac the nasolacrimal duct extends downward to empty into the nose below the inferior nasal turbinate.

This anatomic system provides an additional physiologic protective mechanism to the surface of the globe. The tears secreted by the lacrimal gland in the upper outer region pass downward and medially across the surface of the conjunctiva and cornea to be collected by a squeegee-like action of the lids into the medial angle. Here, capillary action of the puncta and the suction of the sac produced by the action of certain lid muscles pull the tears into the lacrimal sac through the canaliculi. By means of gravity and aspiration produced by movement of the air in the nose, the tears are drawn downward and empty into the inferior meatus of the nose. Thus a system is developed which provides for constant moistening of the mucous membrane surfaces of the globe.

Conditions Affecting the Lacrimal System

Clinical conditions affecting the lacrimal gland are relatively rare. Acute and chronic types of dacryoadenitis (inflammation of a lacrimal gland) are sometimes seen. Occasionally, mixed tumors of the gland are encountered. These tumors usually appear past middle life and result in exophthalmos, some restriction of movement of the eyeball, and in the later stages, visual disturbances. They are moderately malignant in nature with fatal metastases occurring, particularly when the tumor is found in younger persons. Surgical excision is the treatment of choice.

Certain abnormalities of secretion may occur in which the amount of secretion is either excessive or deficient. A test of secretion has been developed known as the Schirmer blotting paper test. A strip of blotting paper 5 x 15 mm. is placed in the conjunctival sac. When a normal degree of secretion is present, the entire strip of blotting paper becomes wet in five to six minutes. If this occurs in a shorter period, excessive secretion is present; if it occurs in a longer period, there is hyposecretion. Although annoying, hypersecretion is not serious. Hyposecretion, which sometimes appears during the menopause, will result in drying of the conjunctiva and cornea and subsequent corneal erosion and ulceration.

The more important clinical conditions affect the drainage apparatus rather than the tear production system. Perhaps the most common condition encountered is congenital occlusion of the nasolacrimal duct, or congenital dacryostenosis. This may be unilateral or bilateral. Shortly after birth the mother notices that an excessive amount of mucous secretion is present in the conjunctival sac. When the child cries the tears pour over the lid margins (epiphora) instead of passing down the drainage channels. This condition is usually due to failure of the passageway from the lacrimal sac into the nose to become completely patent before birth. Occasionally this patency will develop within the first month or two of the infant's life. If the duct does not open in four to six months, some type of active treatment is necessary. Occasionally, massage of the lacrimal sac will force out a plug of mucus or will break the thin membrane which blocks the opening into the nose. If this is not successful, it is necessary to pass a metal probe through the punctum and canaliculi, lacrimal sac and nasolacrimal duct to establish the opening into the nose permanently. Usually a single probing is all that is necessary to cure the condition.

Chronic inflammatory disease in the

lacrimal sac is seen with moderate frequency in the older age groups. The patient complains of a constant tearing associated with some mucus-like discharge in the affected eye. Pain is rarely noted. This condition may be treated by irrigation of the lacrimal sac, by the use of probes, or by operation in which a new communication between the lacrimal sac and the nose is established. In most cases of chronic dacryocytitis, the blockage in the system occurs in the nasolacrimal duct. Acute dacryocystitis will occasionally appear with much more dramatic clinical findings. Often these acute attacks are superimposed on an already existing chronic condition. The patient presents himself with a boil-like swelling at the inner angle of the eye. He complains of excessive pain and tenderness in this area together with excessive tearing and discharge from the conjunctival sac. In the acute stage, treatment consists of hot saline compresses and antibiotics. When the acute phase subsides surgical excision of the infected sac or perhaps a communication operation is carried out.

Trauma to the lacrimal apparatus is usually associated with injury to the eyelids in which one or both of the lacrimal canaliculi become involved. If this should happen, very careful surgical repair of the lacerations is necessary to restore the continuity of the canaliculi and permit continued drainage of the tears into the nose.

Summary

It has been seen that the eyelids and the lacrimal apparatus constitute a protective mechanism which is essential to the preservation of vision. Many of the everyday conditions which one encounters in ophthalmology affect these two systems. It is important for us to have some knowledge of their origin and treatment. Let me emphasize again the importance of understanding the anatomy and the physiology of this region as a prerequisite to understanding the clinical conditions and their treatment.

IN THE GOOD OLD DAYS

(The Canadian Nurse — MARCH, 1921)

The nurse of the future will still need to be a skilfully trained attendant of the sick. But she must be something more. She must have a training in the wider outlook, an understanding of the larger problems that confront her profession, and an individuality and initiative to meet and solve the problems that confront her.

* * *

A dental clinic for preschool age children, nutrition clinics for undernourished preschool and school age children, and posture clinics for all children were to be organized in Halifax. The dental clinic was considered to be the first of its kind in the world.

* * *

Hippocrates, the physician of ancient Greece, taught his pupils that the highest duty of the doctor is to prevent disease, then to cure disease, and where prevention or cure was impossible, to alleviate suffering.

* * *

Publicity campaigns are one of the effective methods of modern business. The medical and nursing professions should take a leaf from the business book . . . There should be a central Canadian organization for the preparation of literature, outlining in a dignified and attractive way, the status of the nursing profession and its claims upon young women of character.

* * *

A professor of pathology in Calcutta found that the addition of salt to Chaulmoogra oil produced more effective results in the treatment of leprosy.

"The Nurse . . . Her Role in Eye Health" is a new and comprehensive booklet relating the various nursing disciplines to the problem of eye health. Known as publication No. 137, the booklet is available at 10 cents per copy, from the National Society for the Prevention of Blindness, 1790 Broadway, New York 19, N.Y.

GLAUCOMA

T. A. S. Boyd, M.B.

For the research-minded doctor, glaucoma bristles with fascination. There are many centres in the civilized world where intense efforts are being made to solve the problem of its pathogenesis and treatment.

Physiology of Intraocular Fluids

Any photographer knows the importance of maintenance of exact dimensions in his camera. The lens must be placed in precise relationship to the film. Any alteration of this relationship causes blurring and distortion of the photographic image. This is true of the eye also. Its dimensions are kept constant by maintenance of its globular shape. It is, in fact, inflated like a balloon with fluid. When a balloon is inflated, its shape is kept by tying it with a string so that the air cannot escape. The biological needs of the eye, unfortunately, will not accept such a simple mechanism. The intraocular fluids must not only be maintained at a constant pressure but there must be a constant flow of fluid.

If the drain of a bath is closed and the taps are open, the bath will fill and overflow. If the drain is opened the bath might still overflow, though less rapidly, or it might gradually empty. This would depend on whether the flow into the drain was greater or less than that from the taps. A constant level of water could be maintained by carefully adjusting the entrance and exit flow.

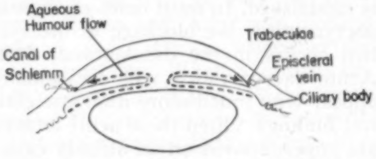

Figure 1 Shows route taken by aqueous humor flow from ciliary body, through pupil into anterior chamber, through trabeculae into Canal of Schlemm.

In the eye, the ciliary body is the tap which secretes aqueous humor to provide fluid flow for biological needs and intraocular pressure for maintenance of the globular shape. (See *Figure 1*). The drainage of aqueous humor occurs into the peripheral angle of the anterior chamber between the posterior surface of cornea and the anterior surface of the iris. In this angle tiny passages through a spongework of tissue (trabeculae) lead to the Canal of Schlemm which is embedded in the sclera just beyond the corneal margin. Exit channels from the canal leave the eye to join veins on the outer surface of the sclera. Just as in the bath, a delicate balance of inflow and outflow is required to allow adequate throughflow and to maintain sufficient intraocular pressure.

Definition of Glaucoma

Glaucoma is the name given to a group of conditions of varying pathology, all of which have one factor in common, increased intraocular pressure. This occurs when the balance of fluid inflow and outflow is disturbed. Intraocular pressure rises too high, either because the drainage is inadequate or, less often, because inflow from the ciliary body is too great.

Pathological Classification and Mechanism

The conditions which cause a rise in intraocular pressure are classified into two main groups, the secondary and the primary glaucomas.

Secondary Glaucoma: An intraocular inflammation may produce exudates which block the drainage angle. A tumor of the ciliary body or the iris may invade the angle. Degenerative flakes of lens capsule may be carried to the trabeculae and cause increased resistance to aqueous humor outflow. Secondary glaucomas such as these are less common than the primary glaucomas.

Primary Glaucoma: There are three

Dr. Boyd is connected with the Department of Ophthalmology, University of Alberta and University of Alberta Hospital, Edmonton.

main types: Closed (or narrow) angle glaucoma, open (or wide) angle glaucoma and congenital glaucoma (buphthalmos). (See TABLE 1.)

1. *Closed Angle Glaucoma:* In this type, obstruction to the aqueous humor outflow occurs because the iris root lies too near the trabeculae at the inside of the periphery of the cornea. At first it merely touches the area but later it is adherent to the trabecular tissue over the Canal of Schlemm.

Four factors play a part. (See *Figure 2*).

1. The anterior chamber may be congenitally shallower than average.

2. The lens, which always grows larger with advancing age, reduces the depth of the anterior chamber by pressing the iris forward.

3. The aqueous humor, which is secreted into the posterior chamber, may find difficulty in passing through the pupil into the anterior chamber (pupillary block). The increased pressure in the posterior chamber blows the iris forward (iris bombé) closing the drainage angle. These three factors may cause chronic closed angle glaucoma.

4. A fourth factor may be added which precipitates a sudden final closure of the drainage angle. An attack of acute, closed angle (congestive) glaucoma ensues. The exact nature of the fourth factor is not known but it is something that suddenly adds embarrassment to the already embarrassed drainage mechanism. Swelling and congestion of the ciliary body or the root of the iris may be the mechanism. The angle may become crowded by the root of the iris during full dilation. In relation to this latter point, dilation of the pupil by dark adaptation, as when viewing television, or by release of adrenalin during excitement, or through the action of local or systemic drugs may all precipitate an acute attack of glaucoma. Nervous vasolabile people and stout middle-aged women are likely to develop acute congestive glaucoma, particularly

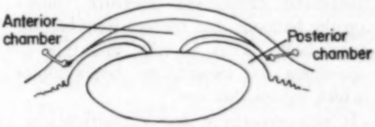

Figure 2 Shows conditions predisposing to closed angle glaucoma — large lens and shallow interior chamber causing pupillary block. Note iris root in contact with trabeculae.

TABLE 1

CLASSIFICATION OF PRIMARY GLAUCOMA

Type	*Cause of obstruction of Drainage*	*Signs and Symptoms*
Closed Angle	Iris root touching or adhering to inside of peripheral cornea in drainage angle.	*Chronic noncongestive* — symptomless, loss of visual field. *Chronic congestive* — headache, blurring, halos, loss of visual field. *Acute congestive* — severe pain & blindness.
Open Angle	Obstruction at entrance to or exit from Canal of Schlemm.	Symptomless loss of visual field.
Congenital	Congenital remnants in drainage angle obstruct outflow.	Pain Distension of eyeball Blindness

during premenstrual and menopausal disturbances.

2. *Open Angle Glaucoma:* Obstruction to the aqueous humor outflow occurs at an unknown point lying between the trabeculae in the drainage angle and the veins on the surface of the sclera (episcleral veins) which collect from the Canal of Schlemm (See *Figure 1*).

3. *Congenital Glaucoma:* Closed and open angle glaucomas compose the bulk of cases seen with this condition, but we must not forget the third primary glaucoma — congenital glaucoma or buphthalmos. Obstruction to the aqueous humor outflow occurs because there has been incomplete development of trabeculae over the Canal of Schlemm. The canal may even be absent. In babies, the walls of the eye are soft and elastic. Increased intraocular pressure "blows up the balloon" and the eye may become very large. That is why this type of glaucoma is known as buphthalmos which means "ox eye."

It is convenient for classification to divide primary glaucoma into three clear-cut types, but clinically it is not always easy to be sure with which type we are dealing. In fact, one may suspect that both open and closed angle mechanisms may be at work in the same patient. It is even more difficult in the present state of knowledge to assess the contribution of congenital defects to adult glaucoma when such defects have not been sufficient to cause damage in early childhood.

Symptoms and Signs in Glaucoma

Consideration of symptoms in glaucoma emphasizes the classification of glaucoma into closed and open angle types.

In *closed angle glaucoma,* patients may suffer recurrent headache and eyeache associated with simultaneous blurring of vision in contrast to migraine in which headache occurs after visual symptoms cease. These symptoms occur particularly in dim light as, for example, when viewing television and during nervously stressful situations. When vision is blurred there may be rainbow-colored rings around lights at night. This is known as chronic congestive closed angle glaucoma. Attacks occur when intraocular pressure is suddenly raised by closure of the drainage angle. They tend to be followed by loss of some degree of peripheral vision.

If the attack is severe and acute congestive closed angle glaucoma develops, the pain may be unendurable and intraocular pressure may rise higher than intraocular arterial pressure. The eye is rapidly blinded because intraocular pressure obstructs retinal arterial blood flow. Although such symptoms are characteristic of closed angle glaucoma, many cases are completely free of all symptoms. When symptomless the condition is known as chronic noncongestive closed angle glaucoma.

In contrast to the closed angle type, *open angle glaucoma* (sometimes called chronic simple glaucoma), is invariably a symptomless disease. It causes painless, slowly progressive loss of visual field. This may remain unnoticed by the patient until very far advanced because the loss of field in one eye may be masked by an intact field in the other eye.

In *congenital glaucoma,* raised intraocular pressure causes hazy edema of the cornea. If untreated, the eye becomes painfully distended and the corneal diameter may become 50 per cent larger than normal. The baby soon becomes blind.

Investigation of Glaucoma

It is suspected that between 2 and 5 per cent of all people over 40 years of age suffer from glaucoma. What is the best way to discover early those whose sight is endangered by this frequently symptomless disease?

Tonometry: By definition, glaucoma implies increased intraocular pressure. A tonometer is used to measure the pressure. With the patient lying down, the instrument is rested on the locally anesthetised eye. It measures the extent to which its weighted plunger indents the cornea. The amount of indentation depends upon the pressure in the eye. Reference to a table converts the degree of indentation as read on the instrument's scale to pressure in millimeters of mercury. The average intraocular pressure is 15 mm. Hg. Pressures of 10-20 mm. are within normal limits. A patient whose eye has a pressure over 25 mm. Hg is usually considered to be suffering from glaucoma.

Unfortunately, finding a normal intraocular pressure at any *one* time does not exclude glaucoma since the pressure may rise above normal at other times. In most normal subjects, there is a daily variation in pressure. It is highest around mid-day, and lowest at about 4:00 A.M. In glaucoma, there is a greater variation. In early cases the pressure may be quite normal at its lowest. To confirm that the pressure is constantly normal one must arrange tonometry at intervals over a 24-hour period, usually every four hours.

Provocative Tests: Even finding a normal pressure over 24 hours does not exclude an occasional rise at other times. There are various factors known to cause increased pressure in glaucoma subjects, such as reading, dark adaptation, pupil dilation and drinking a large quantity of fluid. All of these may be used to provoke a rise of pressure in suspected glaucoma. Unfortunately, these are not very specific tests. Though a positive result is important, a negative one does not mean that the subject is not suffering from early glaucoma.

Tonography: As mentioned above, it is probable that glaucoma occurs mostly because of obstruction to drainage of intraocular fluid. The technique of tonography attempts to measure the resistance to outflow. A tonometer is placed on the eye for several minutes. A record is made of the reduction of pressure which occurs as a result of fluid being squeezed out of the eye by the weight of the tonometer.

Gonioscopy: Another way to investigate the area where aqueous outflow is obstructed is through visual examination of the drainage angle of the anterior chamber between the root of the iris and the back of the corneal periphery. This is known as gonioscopy. The shape of the cornea prevents direct view but a gonioscope permits examination. It is a small optical instrument which is applied to the cornea so that the recess of the angle may be examined in a small mirror. The view enables the examiner to classify the condition as an open or closed angle glaucoma.

Assessment of Visual Field Defects

The modern aim in glaucoma control is to discover and treat the patient when the only symptom is increased intraocular pressure. If untreated, the elevated pressure gradually causes loss of visual field. The mechanism is probably that of ischemia. The blood pressure in the retinal arteries has to compete with intraocular pressure in supplying the retina with blood. If retinal blood pressure is too low in comparison with the intraocular pressure, the retina will be damaged and will eventually undergo ischemic atrophy. Such damage is accompanied by atrophy of the optic nerve. The ophthalmoscope shows pallor and cupping of the optic nerve head. It should be noted that cupping does not occur because the optic disc is pushed back by the intraocular pressure, but because the nerve atrophies following ischemia.

Damage suffered in this way causes characteristic defects of the visual fields. These defects can be charted by techniques known as perimetry and scotometry. While the subject gazes at a central spot, the examiner shows him test objects within the periphery of his vision and asks him to indicate the point at which they are first seen. In this way, areas of blindness can be charted. The characteristic field loss may, at first, be used to make a diagnosis of glaucoma. Later serial tests are used to judge the success of treatment which is planned to reduce intraocular pressure and to halt the advance of visual field loss.

Treatment

Treatment in all glaucoma, no matter which type, is designed to reduce intraocular pressure.

Medical Treatment: Considering again the analogy of the bath, there are two ways to prevent overflow. One is to open the drain, and the other is to turn off the tap. In the same way there are two medical methods of reducing the intraocular pressure.

1. The first method uses eye drops which open the drain. Miotic drops such as pilocarpine and eserine and newer preparations such as carbachol, fluoropryl, demecarium bromide and phospholine iodide act by increasing the outflow of aqueous humor thus reducing the intraocular pressure.

2. The second type of drug turns off the tap. Diamox which is taken by mouth and two per cent adrenalin applied as eye drops reduce the amount of aqueous humor secreted by the ciliary body thus reducing intraocular pressure.

Surgical Treatment: If the drugs fail to control intraocular pressure, there are several possible surgical operations.

1. Those which increase the drainage of aqueous humor aim to produce a fistula between the anterior chamber and the subconjunctival tissues. These include: Elliott's trephine, Lagrange sclerectomy and iridencleisis.
2. On the other hand, the inflow of aqueous humor may be reduced by diathermy applications on the outside of the eyeball just behind the ciliary body, retrociliary diathermy.

At one time, surgery in glaucoma was popular but it was often noted that although intraocular pressure was reduced, the patient continued to lose visual field. As a result many ophthalmologists have come to prefer medical treatment whenever possible. There is one exception, however. In closed angle glaucoma when the pupillary block mechanism is at work and the iris is blown forwards, a small piece of iris near its root may be removed, peripheral iridectomy. (See *Figure 3*). This allows aqueous humor to flow from the posterior into the anterior chamber without flowing through the pupil. The iris therefore cannot be blown forwards. This treatment is frequently successful in an early case of this type and may give permanent cure.

Finally, surgical treatment of congenital glaucoma must be mentioned. When the glaucoma is due to incomplete development of the trabeculae over the Canal of Schlemm, one can often see, with a gonioscope, abnormal masses of tissue in the angle of the anterior chamber. A simple incision into this tissue (goniotomy) may be enough to relieve the elevated intraocular pressure.

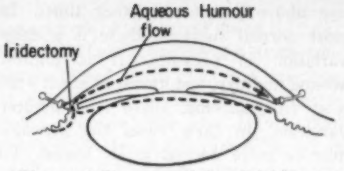

Figure 3 Shows peripheral iridectomy which has provided a new route for aqueous humor which by-passes the pupil. Note angle open again because iris is no longer blown forwards and aqueous humor again able to drain through trabeculae to Canal of Schlemm.

Prognosis in Glaucoma

Seldom if ever is it possible for a doctor to inform his glaucomatous patient that he is cured. The best that the ophthalmologist can promise is to retard the progress of visual field loss. This can be done if the patient accepts that he must continue treatment for the rest of his life. He must be prepared to attend his doctor at regular intervals to have his intraocular pressure and his visual fields checked so that the frequency, type and strength of treatment may be adjusted. For the patient, this is a tedious business but no worse than the regime of a diabetic or cardiac patient. For the doctor, the situation is full of frustration and disappointment because most patients show gradual deterioration in spite of the best of care.

NLN Convention

The National League for Nursing 1961 convention will be held April 10-14 in Clevelan. A highlight will be an address by Dr. Samuel Hayakawa, professor of language arts, San Francisco State College, entitled "Do you know if you are communicating?" The program is as follows:

April 10 — "Health Needs — Whose Problem? Whose Responsibility?"

April 12 — A.M. "Meeting Patient Needs — An Approach to Teaching"

P.M. "Measuring the Effectiveness of Public Health Nursing Services" and "Manpower — Challenge of the 1960's."

April 13 — A.M. "Patterns of Professional Education"

P.M. "Community Dynamics and Nursing Education"

April 14 — A.M. "Research to Identify Scientific Creative Talent"

Hotel reservation blanks appeared in the November issue of *Nursing Outlook*. Registration fees for non-members are $20 for the week or $8 daily. For further information write: National League for Nursing, 10 Columbus Circle, New York 19, N.Y.

EYE INJURIES

M. R. Marshall, M.D.

Eye injuries are numerous and sometimes very serious. They are more frequent than the small size of the eye might lead one to expect.

It has been stated that between 10-12 per cent of all industrial injuries are related to the eye. In some industrial centres upwards of 50 per cent of all injuries are eye injuries. More eyes are lost than arms, legs, hands and feet combined.

Corneal Abrasions and Foreign Bodies

The commonest eye injuries are foreign bodies lodged under the lids, corneal abrasions and corneal foreign bodies. Warning signs and symptoms of injury may appear immediately after the injury or may be delayed several hours and sometimes much longer. The patient, therefore, may be able to say exactly when the accident occurred, he may have only a vague recollection of the accident or he may even be totally unaware of it.

A patient with a corneal abrasion or corneal foreign body usually complains of photophobia, lacrimation and irritation especially when closing or opening his eyes. The degree of irritation is directly proportional to the extent of the abrasion and to the intensity of the reaction set up in the corneal cells surrounding the foreign body. A metallic foreign body frequently gives rise to a "rust ring" — rusting of the corneal cells adjoining the foreign body — within a few hours after the accident. This is the greatest cause of the patient's discomfort. An eye with a "rust ring" remains irritated even after the removal of the foreign body. Adequate treatment consists in the removal of both the foreign body and the "rust ring."

The examination of the patient should be carried out either with the patient lying down on a surgical table or in a sitting up position with some form of headrest. The inspection of the eye, including the under surfaces of the lids, becomes easier if a drop or two of one-half per cent solution of tetracaine hydrochloride is instilled into the conjunctival sac, followed by the instillation of two per cent fluorescein and irrigation with normal saline. This procedure relieves the patient of pain, facilitates the eversion of the upper lid, stains abrasions of the cornea green and readies the eye for the removal of embedded foreign bodies. An inexpensive, readily available, sterile sharp-pointed instrument should be used for the removal of embedded foreign bodies. A good example is the No. 11 Bard-Parker blade. If a "rust ring" cannot be removed easily on the first consultation, it would be advisable to postpone another attempt until the following day.

The treatment of an eye with an embedded foreign body should consist of irrigation with normal saline, removal of the foreign body, instillation of two per cent homatropine *(not atropine)*, instillation of an eye ointment (such as sodium sulphacetamide) and the application of an eyepad. The patient should, of course, be instructed to return the following day for observation. The eye should be re-covered if fluorescein continues to stain the tissues.

The examination and treatment of a simple corneal abrasion is similar to that of a corneal foreign body.

Chemical Injuries

Other common types of eye injuries are those caused by chemical agents. Alkalis and acids are the greatest offenders. The former cause more severe damage to ocular tissues, especially to the cornea. Many articles in common use, such as caustic soda, lime, glue, cement, plaster, hydrogen peroxide, hair dyes, soaps, etc., are irritating and sometimes damaging agents. To a lesser extent, gases and vapors also may give rise to irritation of the eyes and sometimes to per-

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Dr. Marshall is attached to the Departments of Ophthalmology, University of Alberta and University of Alberta Hospital, Edmonton.

manent damage of ocular tissues. The commonest of such agents are chlorine, ammonia and hydrogen sulphide.

The most important part of the treatment of an eye which has been splashed by a chemical agent is the *immediate* irrigation of the eye — profuse and prolonged irrigation — with water or normal saline. If at all possible this should be done at the time and place of injury, while arrangements are being made for the transportation of the patient to a first aid station, to an ophthalmologist's office or to a hospital. No time should be wasted in the preparation or securing of neutralizing agents, which are of little or questionable value.

Ultraviolet Radiation

Still another common eye injury is that caused by exposure of the naked eye to the ultraviolet radiation of the arc in gas or electric welding. This is known as "electric conjunctivitis," "welders' flash" or "arc eye." The welder should of course wear special protection. Children should be warned not to stand and stare.

The offending rays are absorbed by the conjunctiva and cornea, producing a keratoconjunctivitis. The conjunctival vessels become injected, the corneal epithelium edematous and frequently, multiple corneal erosions can be demonstrated with the use of fluorescein. The patient's complaints consist of soreness, burning and watering of the eyes, intense photophobia and pain. These symptoms develop four to eight hours after the accidental exposure of the unprotected eye to the arc. It is for this reason that most patients with "welders' flash" seek medical aid at night. The best treatment of the condition is the instillation of one-half per cent tetracaine hydrochloride (Pontocaine). Irrigation with cold, normal saline is soothing.

Prolonged exposure of the eye to reflected light from a glistening surface, such as snow, may cause irritation of the lids, conjunctiva, cornea and retina. This has been called "snow-blindness." It is an incorrect term, for there is no true blindness. Similar irritation may occur from exposure to a "sun-lamp." Sun glasses act as good protection in these cases.

Treatment and Prevention

Severe eye injuries such as penetration lacerations and damage from strong, blunt blows require the services of a physician who has had special training in this field of medicine. First aid for an eye which has sustained serious injury should be limited to the application of an eyepad and the transportation of the patient to the physician or to the emergency department of a hospital. These injuries may cause serious intraocular infection, traumatic cataract, detachment of the retina, etc., which not infrequently impair vision permanently. In fact, in some instances the vision of the fellow or uninjured eye may be lost, too. This is called "sympathetic ophthalmia." It can only be prevented by the removal of the injured eye within two weeks of the incident. It is for these reasons that prompt and adequate treatment of eye injuries is of the greatest importance.

The ideal treatment for injuries of any description is their prevention. It has been authoritatively stated that the large majority of eye injuries can be prevented by the use of screens attached to machines, by the wearing of face masks, goggles or ordinary glasses. Unfortunately, not all men and women are willing to take the trouble to protect their eyes until it is too late. Such precautions are important to all of us not only as workers in factory, farm or home but also as hobbyists. Let us remember that one careless moment may prove expensive for the rest of one's life.

Another important point which ought to be remembered is that *improper first aid may cause greater loss of vision than the original accident.* Improper first aid includes not only *wrong* treatment but also *neglect to render adequate treatment promptly.* Every eye injury, no matter how trivial, should be looked upon as potentially dangerous. Unfortunately, the injured individual is not always conscious of any unusual injury. Some of the deep, serious injuries are much less painful than the superficial insignificant ones. The most serious complication, following injury, is infection. Infection is most effectively combatted by immediate treatment.

RETINAL DETACHMENT

MARGARET W. SMITH *and* PHYLLIS K. YOUNG

Retinal detachment or separation is one of the more serious conditions encountered in the care of eyes. Surgery is the main form of treatment.

THE RETINA is the thin layer of tissue forming the innermost coat of the eye. It is made up of several layers which include the pigment cells, rods and cones that pick up images and two layers of cell relays that carry the images to the brain. In the normal eye the retina and choroid are in apposition but are anatomically joined only at the optic nerve border posteriorly and the ora serrata anteriorly. The vitreous humor presses the main surface of the retina against the choroid, the nutrient layer.

Unless the underlying causative factor is a tumor, a retinal tear is the fundamental finding in retinal detachment or separation. The tear permits the vitreous humor and transudate from the choroidal vessels to seep in between the retina and the choroid, thus accomplishing the separation.

Causes

Retinal detachment may occur as a result of the following factors.

1. *Trauma:* It has been estimated that about 60 per cent of cases are associated with injury to the head or eye.
2. *Vitreous strands:* These may occur as the result of previous surgery, injury or inflammation. If they become attached to the retina, they may produce a detachment as they contract.
3. *Retinal lesions:* Retinal cysts may lead to detachment.
4. *Neoplasms:* Malignant melanoma of the choroid in adults or retinoblastoma in infants are the commonest intraocular tumors associated with detachment.
5. *Idiopathic:* About 10 per cent of the cases of retinal detachment have no recognizable cause.

There are certain factors which predispose to the development of retinal detachment. They are: Severe myopia, chorioretinitis and peripheral cystic degeneration of the eye. In each instance they cause thinning and degeneration of the retina which, if associated with trauma to the head or eye, could result in a retinal tear and detachment.

Signs and Symptoms

The patient complains of the sudden appearance of "soot-like" spots in front of his eye, flashes of light, and then abrupt blurring of vision which may be described as similar to a curtain being drawn over the eye. The chief symptom is reduction in visual acuity and field of vision. There is no pain since the retina has no pain perceptors.

Diagnosis and Treatment

Examination by ophthalmoscope confirms the presence of a detachment and a possible retinal tear. The pupil must be dilated to allow adequate visualization of the retina. The patient's history, of course, may give the initial clue.

Routine treatment will be bed rest flat on the back with both eyes covered for a variable length of time. The retina often resumes its position which lessens the need for surgery.

Surgery

The operation that is often performed in detachment is *electrocoagulation.* Punctures are made with an electrocautery through the sclera around the tear for the purpose of inducing traumatic adhesive choroiditis. This results in the retina being sealed to the choroid. The subretinal fluid escapes through openings made by Pischel pins.

In some cases *scleral resection* may be performed. In this procedure a portion of the sclera is removed, pro-

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Miss Smith is the head nurse on the ophthalmology ward of the Royal Victoria Hospital, Montreal. Mrs. Young is on the staff of the ear, nose and throat department of the operating room, St. Boniface Hospital, St. Boniface, Man.

ducing scleral buckling which makes the eyeball smaller. The subretinal fluid must be removed. The retina settles back against the choroid. This procedure makes the risk of another detachment less likely.

The *implantation of vitreous* at operation further reduces the danger of recurring detachment.

When detachment is extensive, the *insertion of polyethylene tubing* around the entire globe of the eye is frequently the operation of choice.

The new method of *photocoagulation* is used mainly when there is minimal elevation of the retina from the choroid with no subretinal fluid.

Nursing Care

Preoperative

The patient with a retinal detachment requires several days of care and testing before operation. The following factors should be observed during this phase of care.

1. *Careful and comprehensive explanation* by the surgeon and the nurse of the program of care since the patient's cooperation is essential to his progress.

The patient must understand that he will have to lie flat in bed with both eyes covered for a variable length of time. He must be aware of his need to be completely dependent on others during this period, and accept it. The length of time of comparative helplessness will be governed by the type of surgical procedure; the policy of the individual surgeon; rapidity of healing.

Avoidance of strain of any kind—reaching for articles, lifting the head from the pillow, straining to defecate or void — is of extreme importance. Failure to observe this precaution could undo all that has been accomplished by surgery.

2. *Complete bed rest* in the horizontal position, with both eyes covered. A fracture board should be placed beneath the mattress.

Usually the patient reacts to this enforced position by developing low back pain and abdominal discomfort. He can be told, with complete sincerity, that the back pain, which is due to muscle spasm, will disappear within a short period. It should be noted that, through having the patient experience this discomfort *preoperatively,* he is spared the experience *postoperatively.*

During this interval of preoperative "training," the patient becomes accustomed to:

1. His environment and his companions;
2. the nurses' voices or the voices of other personnel who will be involved in his care;
3. the ward routine;
4. the fact of being fed and bathed by others;
5. the use of a bedpan or urinal;
6. the fact of living in darkness.

The patient can experience an extreme sense of loneliness, helplessness, perhaps even fear. To offset this, he must be sure that he has the means to call for help whenever he wants it and he must be equally sure that he will receive it. The cord of his call bell or light switch should be pinned to his night shirt *at all times.* He will appreciate the extra few minutes spent at his bedside just chatting, whenever the nurse can manage it.

Since it is so extremely important to move him without strain, the patient's clothing should be loose and easily adjustable. This rules out nightgowns and pajamas. The hospital nightshirt is the most practical garment for patients of both sexes.

Surgery for retinal detachment is performed under general anesthesia. The patient will require the usual preparation for it such as enemata and preoperative sedation. A thorough physical examination is an absolute necessity to determine the patient's physical ability to withstand anesthesia and surgery and to detect or rule out the presence of other pathological conditions.

Postoperative Care

Immediately following surgery, the patient requires the general care accorded any patient who has had a general anesthesia with certain added precautions.

1. *Position:* The horizontal position with the head straight, practised preoperatively, must now be carefully enforced.

2. *Vomiting:* This must be avoided *at all cost,* for example through the administration of Gravol.

3. *Diet:* In the first few hours

following operation, fluids should be given with caution and limited to those less likely to produce nausea. They may include plain water, clear tea, consomme. Avoid beverages that tend to produce gas.

The second day postoperatively and thereafter, a liquid and soft diet can be given. There are certain general rules to observe about meals for these patients:

a. Select foods that are easily digested.

b. Avoid foods that require much chewing.

c. Select foods that do not produce gas.

d. Plan for as much variety as possible.

e. Use ground meat and soft vegetables.

f. Give all liquids through drinking straws or with feeder cups.

g. Smaller amounts and more frequent feedings may tempt the appetite of the patient who finds the postoperative period particularly difficult and especially trying.

h. The patient *must* be fed. This should be done carefully to avoid choking and coughing.

4. *Skin care:* The bed bath is very relaxing and refreshing for the patient. It must be accomplished with no strain to him. In giving back care, the nurse will require help. *Only* the patient's *shoulders* and *hips may be turned*. The head must be held straight. Pressure points require particular attention.

5. *Care of the hair* will be at a minimum since movement of the head must be avoided. Short hair styles are a boon. Long hair should be carefully braided preoperatively.

6. *Mouth care:* Mouth washes only. Tooth brush must not be used. Dentures may be removed to be cleaned.

7. *Avoidance of constipation:* It is important to avoid straining on defecation. A mild cathartic on the third postoperative night, followed by an enema on the fourth day and one on every third night, thereafter, eliminates strain and does much to counteract the abdominal discomfort, that tends to be so troublesome to these patients.

7. *Dressings:* With the room darkened, the dressing is changed on the third to fifth day. The patient must be warned not to squeeze the eyes shut tightly. Atropine drops and a steroid ointment are instilled. Pin-hole glasses are given 10-18 days postoperatively but the patient should continue to wear a black mask at night. He should be prepared to accept this routine for several weeks.

8. *Ambulation:* This is accomplished gradually. The period of time that will elapse before the patient is allowed to get up will vary with the individual doctor. After permission is given, on the first day the head of the bed is elevated; on the second, the patient "dangles" his legs; on the third, he stands on the floor. Again it is very important to avoid strain, shock or "jarring." He requires help to sit up; to put on his dressing gown and his shoes; to step to the floor.

He will require renewed warning against stooping, reaching — something he may forget with this taste of independence again.

He should be taken on short walks, first about his own room, then in the corridor to strengthen the muscles weakened through the enforced period of bed rest. When this regime of exercise starts, again will be at the doctor's discretion. The patient must be accompanied at all times and protected against bumping into objects or stumbling.

Preparation for the Future

The patient must leave hospital still wearing his pin-hole glasses and continue to wear them for the length of time considered necessary by his doctor — definitely for several weeks. Unless he can continue with the the routine of careful living that he has become accustomed to in hospital, arrangements for discharge should include a convalescent home or hospital. Avoidance of all strain remains an essential factor.

A retinal detachment can have considerable effect upon the lives of those who fall victim to it. The young person who suffers a detachment as the result of injury must not only forego sports thereafter but his future work must be comparatively free from physical strain. The older person may find that he has to change his occupation to one calling for less physical strain. The housewife may have to adjust her duties to avoid reaching, straining, stooping.

A Glance at Ophthalmology

GILBERTE BRUNELLE

The current wealth of treatments for ocular conditions, the variety of means to improve or recover sight should not detract from the fact that many eye conditions can be prevented through the observance of the principles of good hygiene.

Functioning in the Eye Ward

IN THIS DEPARTMENT of our hospital we have found it helpful to have a manual of techniques as a guide to patient care. From time to time these routines require study and revision. For example, as a result of the most recent perusal of our techniques, it is felt to be much more satisfactory to have the nurses in the eye clinic collect the required specimens of ocular secretions. This is usually one of the procedures required on admission. Since medication or treatment must not be started until after the specimen has been obtained, a greater measure of control in this respect is possible. The laboratory requires 24 hours for identification of types of organisms and an additional 24 hours in which to establish antibiotic-sensitivity. Once the presence of pathogenic organisms has been proven, and the proper antibiotic determined, a regime of local therapy, lasting several days, can be instituted. It is discontinued for 48 hours to permit repeat laboratory examination.

Since the time of admission for each patient cannot always be definitely ascertained in advance, the doctors have drawn up a list of standing orders for the benefit of the patients and the nursing staff.

Patients with eye conditions may undergo several types of surgical intervention:

Keratoplasty or corneal transplantation involves replacement of the curved transparent part of the eye. This is somewhat akin to replacement of the crystal of a watch. It does not mean *fixation* of the eye as some folk mistakenly believe.

For such surgery, the hospital may try to supply its need for human tissues from its own Eye Bank. Where this is not possible, the community Eye Bank may be approached. The Canadian National Institute for the Blind may lend assistance in various ways for those who require corneal transplantation.

Iridencleisis, the operation for glaucoma, is performed to reduce intraocular tension. A passage is opened through which the fluid can filter. Continued pressure on the optic nerve could result in blindness.

Strabismus requires adjustment of the ocular muscles so that the eye is brought back to a normal position. In the young patient who has the defect corrected promptly, proper eye function is quickly restored.

Retinal detachment may be remedied by electrocoagulation or by suturing. This condition may result from trauma, extreme shortsightedness or degenerative retinitis.

The presence of a *cataract* requires removal of the lens of the eye.

A *foreign body* in the eye, if it is metallic in nature, may be removed by an electromagnet.

Diacryocystorhinostomy is performed to ensure a passage for lacrimal secretions into the nose.

General Principles of Postoperative Care

Although surgery on the eye can be either minor or major, there are general principles of care applicable in all cases.

Lighting on the eye ward should be subdued. A patient should never be subjected to a bright or direct light.

Diet may be determined by specific doctor's orders in some cases but the competent nurse should be aware of the general needs of ophthalmological patients:

1. Foods should be easily digested and low in residue.

Miss Brunelle is a head nurse on the ophthalmological ward of Notre Dame Hospital, Montreal.

2. Foods requiring much chewing should be avoided.

3. Drinking straws should be used for fluids in order to avoid choking and coughing.

4. The patient must be helped with his meals. This is one rule that should be enforced. It is an absolute necessity when both eyes are covered but it should also be remembered that even when the patient has one eye uncovered, he may be unable to see properly without glasses. It might also happen that what appears to be a perfectly normal good eye is an artificial one!

Posturing The doctor's orders may simply note that the patient is to be made comfortable. It is important for the patient to avoid personal effort and strain. Two people may be required to lift him. His head must be supported when he is being moved. For the patient who is required to lie very still, two pillows placed lengthwise to support his back and lumbar areas with a third one crosswise beneath his head and the foot of the bed raised slightly, can be a very comfortable position.

Not all patients who have had eye surgery require the same degree of bed rest or immobility. An example is the person with a chalazion. This is a small cyst found on the upper or lower eyelid and its removal is a very simple procedure. This may be done in the outdoor clinic and the patient allowed to return home within half an hour of its removal.

Eye surgery of a more serious nature usually requires several days of bed rest before the patient is permitted to get up. When such permission is given, the patient must receive assistance to sit on the side of the bed, to put on his slippers, to walk. Missteps and bumps which could be injurious must be prevented. The operative eye must be treated delicately in order to avoid complications. Shock or physical effort might cause hemorrhage into the anterior chamber or other damage. This could result in delayed healing, partial or total loss of vision.

In the application of medications to the eye it might be helpful to compare the globe of the eye to the dial of a watch. The surgical incision is very frequently made in the upper part of the eye between "ten and two o'clock." In any treatment of the eye, we must avoid touching the eyeball. Instillation of eye drops or other medication is best accomplished by asking the patient to look upward while the lower lid is gently drawn out to form a little pocket into which the medication can be dropped. Ophthalmic medications are costly and should be used with discretion and as ordered to prevent waste.

Asepsis is of particular value in eye surgery. Techniques should be carefully observed. Once established, it is very difficult to control hypopyon — an infection that results in a collection of pus within the anterior chamber of the eye. Ophthalmological patients are often aged people whose resistance is generally lower.. Occasionally, there may be a certain amount of reluctance to impose a heavy regime of medication on the elderly. Inadequate treatment can be very unsatisfactory and, in spite of possible risks, the necessary regime should be observed. A sequel to an eye infection could be enucleation in an effort to prevent sympathetic ophthalmia. This solution to the problem can be very disturbing to the patient and his family. It can even be demoralizing.

Moral Support

Patients with eye conditions tend to be anxious. Their disability can be severely handicapping and is often of recent origin. The individual may not have adjusted well emotionally. He has not yet become used to seeing less and has not learned to compensate for this by depending upon others for assistance as needed. Loss of vision does not mean that the patient has suffered loss of individual personality. He must be considered as an individual, helped discreetly and given continual encouragement. This period of dependency may mark the beginning to a brighter future.

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THE WORLD OF NURSING

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74 STANLEY AVENUE, OTTAWA

You have noticed, no doubt, that National Office began the New Year with a change in the logo for these pages — from Nursing Across the Nation to The World of Nursing. We hope you like the change.

CNA Recruitment Program

One of the very pleasant tasks the Assistant Secretary in CNA National Office has is correspondence with young high school students interested in nursing. The majority of inquiries come during the fall and winter months when school is in session. Requests are made for material for the preparation of job studies assigned through career guidance programs. Others write for general information on nursing.

In 1960 we corresponded with 249 high school students, 4 of whom were boys. Each student received our pamphlet "What To Look For When Choosing a School of Nursing" and their letters were forwarded to the provincial nurses' association of the province in which they resided. Students preparing job studies were sent additional material to assist them with their assignments. A comparison with previous years shows a decrease in the number of requests. In 1959, 303 requests were filled whereas in 1956 CNA National office answered 1045 letters. This does not, however, indicate that interest in nursing is waning in the minds of our young people. Provincial associations have active recruitment programs as do local hospitals. In 1959, 6496 students were admitted to schools of nursing in Canada as compared to 6314 in 1956 and 5859 in 1953.

ICN Congress

Plans have been made by the CNA, in cooperation with the provincial nurses' associations, to include observation visits for nurses from other countries enroute to and from the ICN Congress in Melbourne, Australia. Canada will play its part in international nursing affairs as nurses from across the country attend the Congress.

Next CNA Biennial

It is not too early to begin planning for a visit to Vancouver, scene of the CNA Biennial meeting in 1962. The dates — June 24th to June 29th.

Research in Maternal and Child Health

From the *RNABC News Bulletin*—

The formation of a committee on Research in Maternal and Child Care in British Columbia arose out of a feeling of dissatisfaction with the nursing care given the obstetric patient, as expressed by the nurses attending the educational day prior to the 1958 Annual Meeting of the RNABC. The committee agreed to set up a study that would become part of a national plan to determine the type of obstetrical service needed, and, as their contribution, they proposed to investigate what the mother thinks that she needs in terms of physical care and emotional support by the nursing staff of the community during the obstetric cycle. Guidance, particularly with regard to the method of choosing a statistically sound sample for a study, the number of cases necessary to provide an adequate sample, and possible methodology, was offered by Mr. John Doughty, Director, Division of Vital Statistics, Provincial Department of Health and Hospital Insurance who met with the committee.

It was agreed that care must be taken to insure that responses of mothers reflect their own opinions, uninfluenced by the wording of a questionnaire or the conduct of an interview, if such responses are to constitute the data for a study. It was decided that a preliminary survey, using the critical incident technique, would be useful to gather information about what the obstetrical patient considered particularly helpful and what she considered particularly harmful in connection with the nursing care she received. A simple questionnaire was drawn up to be given to the mothers at the end of the maternity cycle when they would be in a position to cite incidents from their antenatal period, hospital confinement, or their first weeks at home.

During the two-week period October 3-17, the questionnaires were given to each new mother visited by the nursing staffs of the Metropolitan Health Committee and the Victorian Order of Nurses in the Greater Vancouver district, and the Simon Fraser Unit in New Westminster. Each mother was asked to complete the questionnaire six weeks after delivery.

Foreign Nursing Journals

National Office receives nursing journals from Israel, Japan, Denmark and Finland at regular intervals. The English resumés enclosed with these publications are very interesting. If you can read any of these languages, let us know where you are. We shall be glad to send the journals to you.

A Message from the ICN President

This marks the end of another eventful year and almost the end of a most eventful term of office. I send you a most hearty greeting for joy and success in the new year ahead. It is a pleasure to communicate with you at any time. It is a special joy to send a New Year's message to each one of you, our ICN members through the world!

The past year has been exciting and demanding. Many individuals serving as members of ICN committees have met at headquarters with our staff this year. They have given generously of their time and knowledge in order that ICN might continue its progress. We believe that when you receive reports of these activities you, too, will be pleased and proud.

Within a few months many of us will meet in Australia. The nurses of our hostess countries have made extensive plans. They continue to labor tirelessly in planning for our pleasure and for the effectiveness of our meeting in April. We look forward to a large registration representing our membership. We also look forward to your thoughtful discussion and decisions on the many agenda items. For this reason I earnestly invite your preliminary study of agenda items with your colleagues at home, in order that the decisions which we make in April will show both Wisdom and foresight. Our responsibility is great. The decisions that we make will determine the scope of our usefulness in the future.

Each member association has its own plans and its problems. However, as a world federation of professional nurses, we must always remember the very special opportunity and privilege that we have to help and encourage each other. This bond of friendship and sharing of professional knowledge enriches the life of each one of us. It helps us all to extend the usefulness of the nursing profession.

Again, thank you for your help in 1960. The Congress theme is "Wisdom and Guidance through Professional Organization." We look forward to your continued help in the further development of this goal.

A joyful and successful 1961 to each of you!!

Agnes Ohlson,
President, ICN

ICN News Letter No. 90.

The ornament of a house is the friends who frequent it.—Ralph Waldo Emerson

NURSING PROFILES

The School of Nursing, Dalhousie University, Halifax, welcomed **Thelma Irene Potter** to the faculty as lecturer in principles of administration late last year. Miss Potter, who obtained her Bachelor of Nursing from McGill University in 1952, completed studies for her Master's degree in 1960 at Boston University.

THELMA POTTER

A graduate of Victoria General Hospital, Halifax, she served as a nursing sister with the Royal Canadian Navy 1944-49. In addition to her university work since that time, she obtained several years' experience in clinical instruction at the Montreal Children's Hospital and Peter Bent Brigham Hospital, Boston. Her hobbies and outside interests are many and varied. They range from vigorous sports and pottery making to the activities of the University Women's Club and the Local Council of Women. Nova Scotia is her home province and her present duties and location give Miss Potter the chance to renew associations in very familiar surroundings.

Ruth Catherine Aikin who joined the faculty of the University of Western Ontario School of Nursing in 1958 has been appointed acting dean of the school. Prior to her university appointment she had been the associate director of nursing education, Calgary General Hospital. Her previous experience includes public health nursing, overseas service during World War II, service as assistant registrar of the ANPQ, and teaching duties at the Montreal General Hospital — her home school.

(Harry MacKellar's)

CATHERINE AIKEN

Miss Aikin succeeds **Edith M. McDowell** who had served as dean since 1947 until her retirement during this past year. In 1959 Miss McDowell inaugurated a Master's program for nurses — the first of its kind in Canada. She has accepted a post-retirement professorship in nursing administration and will be responsible for the students enrolled for study towards a Master's degree at the University of Western Ontario.

EDITH M. McDOWELL

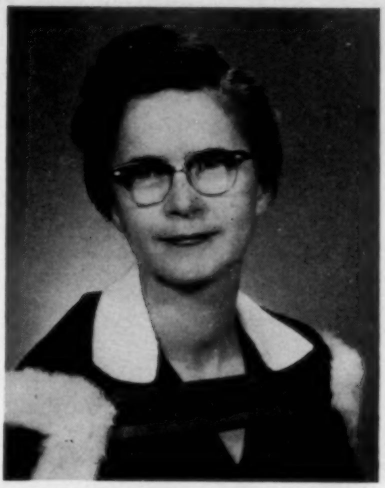
Muriel Eileen Thompson, the new director of nursing of Victoria's Royal Jubilee Hospital begins her duties this month after completing requirements for her Bachelor of Science degree at Teachers College, Columbia University. Saskatchewan-born and educated, she is a graduate of Winnipeg General Hospital and had previously studied at the University of Toronto where she obtained a certificate in teaching and supervision.

Miss Thompson has a background of many years in nursing administration. Regina nurses know her well since the past 15 years were spent as director of nursing at Regina General Hospital. She served on the SRNA Council and took a helpful part in the committee work required to make the provincial headquarters building a reality. Her community activities as a Soroptomist and an interest in golf and photography provide pleasant off-duty hours. Vancouver Island with its many beauty spots and golf courses ensures continued opportunities for these latter hobbies.

MURIEL THOMPSON

Gertrude Plourde-Jacobs has been appointed educational director of the Société des Infirmières Visiteuses of Montreal. The organization has developed a permanent department of education and Mrs. Plourde-Jacobs will be concerned with instruction for all staff members.

Born and educated in New Brunswick, she received her professional preparation at the Hotel Dieu Hospitals of Montreal and Campbellton. She obtained her certificate in public health nursing from the University of Montreal and completed requirements for her bachelor's degree in nursing from McGill University, majoring in public health. Her postgraduate experience has also included periods of observation and study in Toronto, New York, Rochester and Boston. She joined the Société des Infirmières Visiteuses in 1951 and in the following year, was appointed supervisor of nursing personnel and organized the duties of this new position. In private life she is the wife of a doctor.


GERTRUDE PLOURDE-JACOBS

Jessie L. Stanford, a graduate of Holy Cross Hospital, Calgary, was appointed nurse consultant to the Associated Hospitals of Alberta in August, 1960. For the past four years she was matron of Cardston Municipal Hospital and took an active part in planning for the new hospital which was constructed and opened while she was there.

She had an opportunity to become acquainted with the work of the Association some time in advance of her appointment. She was elected vice-president of the Southern Alberta Regional Conference, AHA, 1956-57 and during the latter part of her term of office she became president. A Westerner by birth, she enjoys many of the sports for which these provinces are noted — hiking, mountain climbing and riding.

Irene Barton, the assistant director of nursing service at Regina General Hospital, has been giving her hospital outstanding service ever since her graduation in 1948.

Irene Barton

During this past year she completed studies for her certificate in hospital nursing service administration. In 1951, she spent several weeks in study and observation of recovery room technique in Montreal, then returned to R.G.H. to set up the recovery unit now in operation and became its first head nurse. In 1952 she became an assistant to the director of nurses.

In addition to her professional duties, she has taken an active part in the work of her church; has been a member of various choral groups and still finds time to care for a home and a little daughter.

Belle Berenson is assistant director of nursing service in charge of auxiliary nursing staff at Regina General Hospital. Born in England, Mrs. Berenson came to Canada when very young. Her basic and professional education were received in Saskatchewan. She is a graduate of Regina General Hospital with postgraduate preparation in psychiatric nursing. For several years she was nursing supervisor of the psychiatric department, R.G.H. This was followed by extensive experience as an office and clinic nurse, and later, three years as public health nurse with the city of Regina health department.

Married, with two small daughters, Mrs. Berenson still finds time and energy for choir work in her church and a variety of sports.

Belle Berenson

In Memoriam

Dame Ellen Mary Musson, D.B.E., R.R.C., LL.D., one of the most prominent figures in the world of nursing died November 7, 1960. A graduate and gold medallist of St. Bartholomew's Hospital, London, England in 1898, she eventually became matron of Birminghan General Hospital. She was the first nurse to be elected chairman of the General Nursing Council for England and Wales, an office that she held 1926-43. She was a member of the Council of the Royal College of Nursing 1916-39, and its honorary treasurer for the next 10 years. She was honorary treasurer of the International Council of Nurses, 1925-47.

In 1928 Miss Musson was awarded the C.B.E. and in 1939 she became a Dame Commander of the Order of the British Empire. In this same year she was also awarded the Florence Nightingale International Medal. She had previously received the Royal Red Cross in 1916 and an honorary Doctor of Laws from the University of Leeds in 1932.

(Continued on page 265)

Protection of Vision in Industry

IRENE M. ROBERTSON

The best treatment for an eye injury is prevention. We can chew with dentures, walk and work with artificial legs and arms, but we cannot see through a glass eye!

SINCE we are all human, accidents will always be with us. In order to avoid danger, one must be able to see it and then take the necessary precautions. At the time of the pre-employment medical examination, vision testing must not be omitted. If it is, this will undoubtedly result in men with markedly deficient vision being put to work at jobs that are potentially dangerous for them. It is not sufficient to test only for distant vision using the Snellen chart. A person with normal vision is rated at 6/6 in this test, but "normal vision" as measured on this chart may not be satisfactory for near work which is tested by the Jaeger chart. A job may require good vision at 14-30 inches (near acuity) if the work is to be done at a bench or at 20 metres (distant acuity) if it involves operating a crane.

The pre-employment medical examination should also include testing for:

1. *Adequate field of vision:* The ability to see to both sides, above and below while focusing on a small target. This saves unnecessary eye and head movements.
2. *Depth perception:* The ability to judge relative distances. This is important for accuracy in almost any job. It is vitally essential to safety around dangerous machinery.
3. *Binocular coordination:* The ability to make both eyes work well together. Without this the field of vision is limited and depth perception may be affected.
4. *Color discrimination:* The ability to detect differences in colors. This is important in some jobs but not essential in most. The common test used is the Pseudo-Isochromatic plates for color perception. People with poor color vision should be tested on the job to be sure that they can distinguish the colors that are used in their work, whether it be traffic signals in truck driving or colored wiring in electrical work.

There is no such thing as "perfect vision." Some persons excel in visual skills valuable for one type of job. Some are superior in another area. Defective vision does not need to be an occupational disadvantage. Visual capacities of workers can be matched to the visual requirements of a job with advantages to the employee as well as to the company through achievement of greater production and safety. Even the blind can meet the requirements and work effectively in the right type of job.

There should be teamwork to see that lighting and painting make a maximum contribution to visual protection. The following factors should be considered:

Is there adequate lighting, particularly in critical work areas?

Is maximum use made of light and paint to make the environment pleasant?

Are contrasts used to aid visual discrimination?

Is there a minimum of glare and shadows?

A light meter removes the guesswork from the job of determining whether adequate standards of lighting are being met.

The protection of the eye from external injury is one of today's most important problems. In the United States, approximately 75,000 eye injuries of a disabling nature occur annually. Of these, 5,000 injuries result in a permanent total or permanent partial loss of vision.[4]

The eye is a highly sensitive and vulnerable target for occupational hazards. Even seemingly minor injuries, many times requiring only emergency treatment, are costly to the individual in terms of medical expense and lost time. In industry, the

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Miss Robertson is nurse supervisor with Imperial Oil Ltd., Regional Health Centre, Edmonton.

company also loses in terms of lost time and increased insurance costs.

Large industries and their supervisors should be well aware of the value of eye protection and the savings to be effected. Employees should wear eye protectors in jobs having distinctive features conducive to eye injury. Protective goggles or shields must be worn in:

1. Processes involving flying objects, small flying particles and dust.
2. Processes involving splashing metal, gases, fumes and liquids.
3. Operations where protection from wind is required.
4. Operations where protection is required from reflected light or glare.
5. Abrasive blasting.
6. Welding as protection against intense sources of light and heat.

The employee whose vision requires the use of corrective lenses, and who is required to wear protective goggles, should be provided with goggles that incorporate the correction in the lenses, or that fit over the corrective glasses. Experience has proven that combining correction with protection in one set of lenses is the most practical solution to the eye safety problem. More comfortable vision is achieved with a wider field. There is a reduced cleaning and maintenance problem. Persons engaged in gas or electric welding and cutting operations must be provided in addition with coverglass welding goggles or shields that have the proper density filter lens for use over their safety prescription glasses.

If you find many employees with their glasses, safety goggles or shields tucked into their pockets, then something is very wrong with the protective vision program or the supervision. One of the preventive safety measures is to make frequent checks on the employee. This is especially important for employees who have poorly corrected vision or poor vision that cannot be corrected. Visual acuity and speed of normal responses change with age and vary with lighting, fog, dusk, etc. The glasses that are right today may be unsuitable in a few months.

Asking the question, "Do you see comfortably?" is a good test of a company's vision program. If there are only a few negative answers, the chances are that insofar as correct vision is a contributing factor, the production per employee is high and the accident rate is low.

To produce, the worker must know how to use his eyes effectively in order to avoid waste through errors and inaccuracies. To have two eyes is better than one eye. We must guard them through good physical, protective devices and an organized safety program. Men and women will not, and cannot, wear protective goggles that hurt or do not fit properly. These will actually interfere with or obstruct their work.

Remember how fortunate you are when you express the greeting, "I am glad to see you."

References

1. Kuhn, H. S., M.D. *Eyes and Industry.*
2. Plain, I. H., M.D. *American Industrial Nurses' Journal.* May 1959.
3. Better Vision Boosts Production. *Scientific American.* (Public Health Bureau). 1947.
4. American Optical Company: Safe Vision on the Job.

A nurse's age may have some bearing on her professional attitudes and therefore on the type of care she gives.

Dr. Joan Dodge reports the results of a survey of 116 nurses and nurses' aides, in a 314-bed institution for the chronically ill and aged. The results are tentative and are possibly limited to the type of hospital surveyed.

The nursing staff was questioned to determine the importance they placed on psychological care. The answers were tabulated according to the ages of the participants. Those in the 20-29 age group considered psychological care less important than any other age grouping. The importance of psychological care reached its first peak in the 30-39 age group, dropped among those in their 40's and 50's and reached its highest peak in the 60-69 age group.

— *The Modern Hospital,* November, 1960

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Nearly 219,000 men, women and children of all ages participated in Canadian Red Cross water safety services and projects last year.

The Nurse's Role in Eye Care in Industry

MYRTLE DELANY, B.SC.

Civilization is largely a world of seeing. Throughout its intricate pattern, seeing is an instantly and universally important factor in the education, experience and performance of human beings. In obvious and unobvious ways, it is a powerful and universal influence in the efficiency, safety, comfort, behavior, health, life and happiness of human beings, individually and collectively.[1]

Vision in Industry

THE NURSE IN INDUSTRY has a very great responsibility to preserve and care for the vision of the employees. This is one aspect of nursing care that cannot be over-emphasized. Mistakes can be so tragic and the results so permanent and far-reaching. Statistics from one survey showed that blindness resulted from 2 per cent of untreated cases in which particles were embedded in the cornea and from 90 per cent of untreated cases where particles had penetrated into the inner part of the eye.[2] According to one authority, improper treatment of industrial eye injuries caused a greater incidence of lost vision than any other single cause. Improper first aid included not only wrong treatment but also neglect to render adequate treatment properly.

In 1957, it was estimated that there were 339,000 blind men, women and children in the United States. It was felt that 50 per cent of this blindness could have been prevented if the proper care had been given at the right time.[3] The nurse and the doctor share responsibility for setting up an appropriate program of eye care. This must assure the correct procedure carried out at the right time by the best prepared person and aimed at the prevention of further damage and infection.

To discuss every aspect of the nurse's role would be impossible in one brief article. The preceding information has rather grimly emphasized the necessity for an adequate program. The remaining comments will deal with the more general principles of eye care.

Vision Testing

This is one of the most important parts of the routine health examination. Early signs of occupational or non-occupational disease may be detected. The nurse usually conducts the test for visual acuity. The Snellen chart is probably the most common method for recording distant vision; the Jaeger test is for near vision.

The Snellen chart must be placed at eye level at a distance of 6 metres with a light placed so that it illuminates the chart evenly but does not shine in the eyes of the person being tested. The Jaeger chart is held 16 inches from the eyes. Each eye is tested separately. The nurse should be able to interpret the findings. 6/12 means that the individual sees at 6 metres what a person with normal vision would see at 12 metres. Read in feet, this would be 20/40 since 6/6 is approximately 20/20. The important figure for the doctor and the nurse is the percentage loss of vision. 6/12 means 84 per cent vision and 16 per cent loss of vision. Persons who have 50 per cent loss of vision or more, despite correction, should not be placed in hazardous areas. On the Jaeger chart, ability to read the J-1 paragraph means that printer's point 3 type can be read; J-3 is point 6 type.

Color vision testing is important in some industries. This is done to determine the degree, if any, of color-blindness. There are several tests. One is the pseudo-isochromatic scale.

What do we accept as good vision? J-3 at 16 inches for near vision and 6/10 to 6/12 for distance is considered adequate. If vision is poorer than 6/12 then the nurse should refer the employee for further examination. She must be most cautious in interpreting the results of eye examination to an

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Miss Delany is with the Health Centre, Canadian Industries Ltd., Plastics Division, Edmonton.

employee. She must not forget that people do adjust to visual handicaps; that many jobs are done best by people with so-called abnormal vision. We have a definite responsibility to place people who are visually handicapped. The success of any vision program for industry is dependent upon and in direct proportion to the cooperation of the employee group. They must be sure that it will not work to their disadvantage.

First Aid for Eyes

In the emergency care of eye injuries, perhaps one of the most important aspects is the nurse's attitude toward the injured employee. She must be aware of the strong emotional factors involved. Most individual eye injuries occur through carelessness, therefore, a strong feeling of guilt exists.

Fear, anxiety or anger can complicate eye afflictions. Flanders Dunbar referred to "the beloved symptom" that was found in men in the armed services who were under various types of stress. Their eye afflictions were often remedied by psychotherapy rather than by glasses. It seems logical that men with actual eye damage would by hypersensitive and emotionally disturbed. The medical manual of the Ford Motor Company states that the nurse should never forget that the ability to withstand pain and discomfort varies in individuals; that considerable emotional upset, not necessarily evident, may be present. A quiet, confident, reassuring manner is essential. This must be accompanied by sufficient explanation of procedures to allay fear and secure cooperation. B. McGrath warns:

> Remember that rehabilitation begins immediately following an injury and that the attitude and actions of the nurse often set the stage for the eventual rehabilitation of the worker.

The immediate and accurate recording of what the employee says happened is most important. The information is useful not only for future compensation purposes, but also in determining the type of injury and the subsequent treatment. The nurse's primary responsibility is to care for the injured employee. It is not for her to judge nor to investigate the circumstances surrounding the accident.

Another very important task for the nurse is to see that the standing orders are not only adequate for all emergencies but that they are known to all who will deal with eye injuries. There must be clear differentiation between the services to be given by the first aid personnel, the nurse and the doctor.

Standing orders should cover the first aid procedure for such things as: Removal of superficial foreign bodies; penetrating wounds of the eye; corneal abrasions and lacerations; lacerations of the eyelids; wounds and blows with blunt objects; burns including chemical, flash or hot metals. They should also outline the emergency treatment for such conditions as inflamed eyes with discharge, sudden disturbances of sight and acute pain in the eye. There should be standing orders to indicate the drugs and solutions to be used, the dosages and the types of emergencies under which they should be administered. The equipment to be used, such as cotton-tipped applicators or syringes, must be indicated. The conditions that are to be routinely referred to a doctor must be specified. The responsibility of the nurse in the follow-up care must be outlined.

Equally important is the strict observance of aseptic and antiseptic technique. Early symptoms of infection often simulate those produced by foreign bodies. Careless handling of an infected eye can spread the infection to the other eye or to other employees. The less a severely injured eye is handled the better although proper and prompt first aid treatment is important in all instances.

Sight is probably the most important single factor in industrial efficiency and in the safety of the individual worker and his fellow workers. To aid in the preservation of this sight is the nurse's role in the care of eyes in industry.

References

1. Luckiesh, M., Moss, F. *The Science of Seeing.* New York: D. Van Nostrand. 1937, p. 548.

2. Grove, J. H. Common Industrial Eye Injuries. *Occupational Health Bulletin,* April 1955.

3. Foote, D. F. M. Ophthalmic Aspects of Light and Vision. *Industrial Medicine and Surgery,* Nov. 1958.

Eye Health and the School Child

MARGARET M. CAMPBELL, B.Sc *and* SHIRLEY M. STINSON, B.Sc.

In almost every school health service, provision is made for the detection of gross visual defect. However, as services have developed, the emphasis has been extended from mere detection to the prevention of eye disease and defect, and the promotion of visual health.

IN THE AREA of detection of visual defects, it is important to review the extent of the public health nurse's responsibility. She confines herself to selection and follow-up those with apparent difficulties. She does not diagnose the type or extent of defect. Thus, a quick, accurate and simple screening device is most useful to her. Testing equipment that will do more or do less than this is unsatisfactory. The consensus is that of all the various types of vision testing equipment available, the Snellen Chart still stands as the most useful, single visual screening device.[1] Shaffer[2] compared three kinds of equipment most commonly used for screening purposes in schools: the Snellen Chart, the Massachusetts Vision Test, and the Keystone Telebinocular. He found that the Snellen Chart was the most adequate single test, when carried out by a knowledgeable examiner. The Telebinocular was satisfactory but selected too many unnecessary referrals. The Massachusetts Vision Test was not selective enough.

Policies regarding the problems in visual acuity that are to be considered referable are determined by the individual school health service. Decisions may be influenced by other factors in addition to the Snellen Chart results.

In some health services the Jaeger test is considered useful in conjunction with the Snellen Chart. This is an arbitrary means of screening out those with near-vision difficulty. However, by simple observation the teacher and the public health nurse may detect such children by certain indicative signs such as peering at the blackboard, frowning, crouching over books. The hypermetropic child may exhibit his signs of visual difficulty by mischievous behavior, inattention, complaints of headache, or disinclination to concentrate for more than a short period. Since she can provide constant surveillance, the teacher is the person with the best opportunity to observe her charges. Although most teachers feel responsible for assisting in this way, they often need the help of the public health nurse in determining what to look for. The demeanor of the child as he carries out his work, and as he joins in school activities may cause the informed teacher to question a child's visual ability. Bringing this to the attention of the nurse will hasten the steps by which the assistance that the child requires is made available.

Discovery of visual difficulties by periodic vision testing and by the teacher's day-to-day observation is essential, but for the public health nurse, it is only the first step.

> The discovery of . . . defects . . . in school children in itself is of relatively little value. In fact, whatever value it has is contingent upon what is done with the information obtained.[3]

The public health nurse has the particular responsibility to see that the difficulty is explained adequately to the family and that the resources for help are made known to them. Often families are confused by the terms ophthalmologist and oculist, optician and optometrist. They also fail to appreciate the many and veiled ways in which symptoms of visual difficulties may be manifested. Perhaps of even greater importance is the fact that visual symptoms may be the first indication of serious systemic disease. The public health nurse has an opportunity during the home visit to convey to the family the importance of a thorough eye examination. Since few eye conditions are rapidly progressive, the

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Miss Campbell and Miss Stinson are on the staff of the School of Nursing, University of Alberta, Edmonton.

family should be counseled to put *quality* ahead of expediency in their plans for securing the required attention for their child. The success of the follow-up will depend, in large measure, on the quality and breadth of the rest of the community health program. If, through an active infant and preschool service, the public health nurse is already recognized by the family as a health teacher, the follow-up is more likely to result in concrete action by the family.

Some visual difficulties are of such a nature as to be amenable to partial correction only. The nurse can assist the child by teaching the family and the teacher how to make the most of what sight the child has. Simple measures such as movable desks; stepstools in the classrom so that the child may approach the blackboard more closely; paper with a dull finish; a heavy black pencil for writing rather than fine pen and ink, may help the child in his effort to learn under handicap. The nurse may suggest where special equipment can be obtained. If financial assistance is required, she can facilitate the family's contact with the agency that can help most effectively. The public health nurse serves as a consultant to the teacher in the prevention of visual loss and the promotion of eye health.

References

1. Gaby, J. R. Testing the Visual Acuity of School Children. *Canadian Journal of Public Health*, Volume 46, 1955, p. 57.

2. Shaffer, T. E. *Journal of Public Health*, Volume 33, 1948. p. 1141.

3. Hanlon, J. J. *Principles of Public Health Administration*. St. Louis: C.V. Mosby Co., p. 503, 1955.

A Hospital Eye Ward

JOAN M. TEMPLETON

Planning any hospital department requires consideration of the needs of the patients.

OPHTHALMOLOGY is a branch of medicine that has come into its own in recent years because of the tremendous advances that have been made in research, treatment and surgical procedures. There is a tendency to group ophthalmology with otolaryngology due to anatomical relationship. Ophthalmological care entails quite a different type of nursing care than that given on an otolaryngology unit. In planning a ward for the treatment of eye conditions one must take into consideration that these patients are usually not acutely ill. Frequently they are "up-patients," although at the same time they are restricted in their activity.

The unit should be designed and furnished to accommodate patients of all ages. Experience has shown that children on the same ward with adults do not seem to present a problem. In addition, this arrangement helps in teaching the undergraduate nurses since it presents a more comprehensive picture and facilitates treatment.

Planning the Ward

Taking the above factors into consideration, a ward of approximately 30 beds would seem to be a good size. Rooms should be spacious and uncluttered with minimum but adequate equipment including adjoining bathrooms. There should be cupboard space for each patient's belongings. Private, semi-private and four-bed wards, painted in subdued pastel colors to prevent light reflection, are necessary. Venetian blinds on the windows permit easy regulation of light. A new device called a "nurse-saver" intercommunication system, frequently built

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Miss Templeton is a member of the staff of the University of Alberta Hospital, Edmonton.

into new hospitals, has its drawbacks in that it tends to startle patients, particularly elderly people. The older idea of a "call-light" system would seem to be preferable.

As television is not recommended for eye patients subdued recorded music would be relaxing. This could be controlled either from the nursing station or from a central spot in the hospital. It would eliminate the necessity for individual radios that are frequently played too loudly, to the annoyance of other patients. Permission to operate individual radios should be at the discretion of the doctor or the charge nurse. Because of the restriction on reading and writing, visiting privileges might be extended from the usual one-hour interval to a two-hour period in the afternoon. As there are few treatments to be carried out, this would not interfere with the ward routine. A lounge in which the patients could visit among themselves or with their friends and that includes a telephone should be a part of the layout.

An ophthalmological unit should be self-contained. It should include clinic rooms which may be used for tests on glaucoma patients and other examinations pertaining to the eye. It would be advantageous to include the operating theatre, thereby eliminating the necessity of too much movement of the patient immediately postoperatively. The operating room staff could be a part of the ward staff. This would be helpful in teaching the operative aspects of ophthalmological nursing to the students.

Treatment Facilities

There must be storage space for linen, and service rooms containing cupboards for stock solutions and equipment. A minimum of sterile equipment is required. Small, portable dressing wagons may be kept in the service room. They can be wheeled to the patient's bedside when dressings are to be changed. Small stainless steel trays containing 2 thumb forceps, 2 sterile towels, 2 gauze dressings 4" by 8", absorbent, eye pad, eye dropper, medicine glass and a stainless steel kidney basin would seem to be adequate. They may be kept on the dressing wagon and can be used for all types of eye dreessings. They could be ordered in sufficient quantity daily from the central supply room along with sterile gloves for those doctors who prefer to wear them for their dressings. Masks must be included also.

The dressing wagon should carry a stock of ophthalmological drops such as, pilocarpine, eserine and fluorescein. Space must be available for the stock of eye ointments which are ordered for each patient undergoing surgery, and for the normal saline solution generally used in eye irrigations. A flashlight for the more superficial examination of the eye is included.

Small hot plates and solution bowls that can be placed at the patient's bedside during treatment of such conditions as acute iritis are kept in the service room. Small portable tables to hold this equipment are convenient since they reduce the congestion on the patient's bedside table. Additional solutions and solution bowls are ordered as necessary from the central supply room. A solution warmer of stainless steel which could be regulated to keep the solutions at the desired temperature should be part of ward equipment. Although the lacrimal irrigation tray is not too frequently used, it should be available.

The nursing station should be centrally located with a medicine cupboard directly off it. The nursing station houses the patients' charts, extra chart refills and the usual office equipment. At least one ophthalmoscope might be kept on hand although most ophthalmologists prefer to use their own. A tonometer for measuring intraocular pressures should also be available. In the medicine cupboard are kept the oral and intramuscular medications and equipment for dispensing them. Narcotics are stored in a small locked cupboard.

Nursing Care

The nursing care of eye patients is quite different from that of other patients. All show some impairment of vision and are somewhat apprehensive. Because it is impossible to foretell what, if any, lasting impairment may remain, these patients need encouragement and reassurance. All patients, whether admitted for medical or for surgical treatment, should have routine blood work and a urinalysis. A history is taken and a physical examination is carried out on admission. If it is thought necessary, a medical consultant may be called. He, in turn, may wish further investigation prior to starting treatment or in conjunction with the ophthalmic procedures.

Patients admitted for surgical procedures, such as cataract extraction, are usually in hospital a day or two prior to surgery. Since cataract patients are often older people, usually dependent on glasses, they find it reassuring to be familiar with the ward layout during the postoperative period when the operative eye is covered. Preoperatively they are given instruction in the postoperative routine and oriented to the ward and their own rooms in particular. The day prior to surgery, preparation of the affected eye may consist of clipping the eyelashes and the eyebrow if requested by the surgeon. In most cases a tub bath is permitted the night before surgery. This is not permitted postoperatively for patients who have had intraocular surgery. Sedation is given at night to ensure a good night's rest. On the morning of surgery the usual preoperative preparation is carried out.

A large percentage of ophthalmic surgery is performed under local anesthesia. The patients are given sedation as ordered by the ophthalmologist before being sent to the operating theatre. The eye ointments of choice are sent with the patient, instilled at the completion of surgery and returned to the ward for use when dressings are changed. If it is not convenient to take the patient's bed to the operating room canvas sheeting, with poles inserted on either side for lifting, may be placed over the stretcher to facilitate transfer of the patient to his bed following surgery. Care must be taken to avoid abrupt, jarring motion. Usually the patient is kept in a prone position for several hours. Then he may be turned to the unaffected side. To prevent falling out of bed and possible injury to the eye, side rails are used. The patient's bedside table is placed on his *unaffected* side. The call-light cord is attached in a convenient position to eliminate unnecessary movement. The patient is kept under close observation. Sedation is given as necessary to prevent pain and restlessness. Nourishment is taken with the assistance of a nurse during the first 24 hours. Fluids are given through drinking straws.

The patient is usually allowed out of bed after the first change of dressing. Approximately 5-7 days postoperatively the dressings are removed. The patient is given dark glasses and started on eye drops as ordered by his doctor. The affected eye is cleansed of secretions each morning before instilling the drops. Usually, the patient is discharged 10-14 days after surgery with instructions regarding the continued use of eye drops, the amount of activity and further visits to the doctor.

Cataract patients, as a rule, comprise the largest percentage of surgical patients on an ophthalmology ward. Glaucoma patients comprise the greatest number receiving medical care. Those who have been admitted for investigation of glaucoma are not confined to bed. Intraocular pressure readings, orthoptic analysis and tonography can all be carried out in the examining rooms by the ophthalmologist or technician. Pressure readings may be taken by a graduate nurse. Eye drops for control of intraocular pressure are usually given by the nurses. A small percentage of glaucoma patients have surgery performed for more lasting relief of symptoms and prevention of visual deterioration.

The diet is as desired unless contraindicated by some other condition such as diabetes mellitus.

Since a specialized type of nursing care is necessary, it is desirable to have a clinical instructor working in conjunction with the ward nurses. All senior undergraduate nurses should be rotated through the unit if possible. Some of the students, following completion of their training, may branch out into public health or industrial nursing. It will be very much to their advantage to have some knowledge of ophthalmic procedures. The physical plan of the ward should include teaching facilities for this purpose.

There is no language like the Irish for soothing and quieting.—SYNGE

CONTACT LENSES

A. Patrick, M.B., Ch.B.

The development of the modern contact lens has been very rapid. It really stems from 1948 with the development of the Tuohy lens.

The first wearable contact lens was made by a glassblower in Wiesbaden in 1887. Shortly after this, ground lenses were developed and, for some years, both ground and blown lenses were produced. The blown lenses had the disadvantage that often 60-70 of them had to be made before a proper fit was obtained. Many minor changes were made in contact lenses, but in 1948 the Tuohy corneal lens was developed. After this, contact lenses really began to increase in popularity. The Tuohy lens was 11-12 mm. in diameter and was fitted flatter than the corneal curvature. Although this was a considerable improvement, the average wearing time was four to six hours and only approximately 30 per cent of the patients were satisfied with them.

In 1954 the microlens was introduced. This was also fitted flatter than the corneal curvature, but it was 9.5 mm. in diameter and had an average wearing time of eight hours. Fifty per cent of the patients were satisfied with their lenses.

The contour lens was introduced in 1955. This one differed from the others by being fitted as close to the corneal curvature as possible. According to Agatston and Barnett, the average wearing time was from eight hours to a full day. Eighty per cent of the patients were successfully fitted.

The contact lenses used today are approximately 9 mm. in diameter with a central optical zone 7 mm. in diameter, shaped to match the corneal curvature as closely as possible with a secondary flatter curve around this. The peripheral curve on the lens has two main functions:

1. It allows the tears to flow under the lens easily.
2. It prevents the lens from gouging into the sclera if it is pushed off the cornea.

The weight of one of these lenses is approximately 18 mgm. as compared with 2.96 grams for the original Wiesbaden blown lens.

Tolerance

Accurate figures on tolerance of contact lenses are difficult to obtain. Available statistics sometimes disagree quite markedly. Hodd, in 1958, in an analysis of 108 lens wearers, classed 42 as failures. He found that 75 per cent of the males were successful or partly successful but only 53 per cent of the females were classed as such. He thought that this was due to the differing reasons for use. Males required them mainly for sports and females, for cosmetic reasons. These figures contrast with those of Westsmith who, also in 1958, in a questionnaire survey, found that 90.3 per cent of those who replied were wearing their lenses, and 70 per cent of this number were wearing them more than 8 hours daily. In his series, females outnumbered the males by 3:1. The men had a slightly *higher* incidence of rejection. Cross, in 1949, in a report on the tolerance to *scleral* fit lenses, found that 33 per cent of those answering his questionnaire had stopped wearing them.

Indications and Advantages

1. *High Refractive Error:* Contact lenses may be a considerable help in these cases especially when the refractive error is accompanied by nystagmus. The lenses will be centred in all positions of gaze and will avoid the prismatic effect of the periphery of a thick lens.

2. *Keratoconus:* This is an irregularity in the curvature of the cornea. It is one of the oldest and best established indications for contact lenses. In the 1908 edition of Fuch's *Textbook of Ophthalmology,* a device called the Hydrodiascope of Lowenstein is men-

---

Dr. Patrick is associated with the Department of Ophthalmology, University of Alberta Hospital, Edmonton.

tioned. It was also noted that it had been used with success in keratoconus.

> This consists of a shallow box which has a lens let into the front. The appliance is fastened over the eye so as to make a water-tight compartment which is then filled with salt solution or some similar liquid.

Ridley, in 1954, showed the improvement that could be obtained in cases of keratoconus by wearing contact lenses rather than glasses. He stated that in patients whom he had been observing for five years he had not seen the condition become worse while lenses were worn.

At the moment, corneal contact lenses with four or five curves are being used in cases of keratoconus. Zekman and Krimmer discussed the advantages of multicurve corneal contact lenses in 1955. They stated that wearers of corneal lenses who had been observed did not show any progression of keratoconus and that the lenses helped prevent hydrops of the cornea.

3. *Irregular Astigmatism:* Corneal irregularities will be filled by the tear layer behind the lens. The anterior surface of the contact lens optically replaces the corneal surface.

4. *Aphakia:* A contact lens may allow binocular vision in unilateral aphakia, that is, after the removal of a cataract. Spaeth and O'Neill, during 1960 reported that 71 per cent of their patients with unilateral congenital cataracts, high myopia or traumatic cataracts obtained third degree fusion when fitted with a contact lens.

5. *Therapeutic:* Tinted contact lenses may be of help in cases of aniridia and albinism. Ridley points out that albinos frequently do not show the expected visual improvement, though they like the lenses and find them more comfortable. Patients with acne rosacea and mustard gas keratitis are often made much more comfortable by contact lenses.

6. *Vocations and Sports:* Contact lenses can be very useful in some vocations, such as the stage. Their popularity in sports has been increasing but there is a tendency for the normal size corneal lens to be lost during very active sports. Scleral fit lenses or very small corneal lenses are more often used in the latter.

7. *Cosmetic:* This is the commonest reason for wearing contact lenses. It has been estimated that at least 75 per cent of contact lenses are bought through vanity.

8. *Use in Poor Weather Conditions:* McGraw and Enoch working in the U.S. Army Medical Research Laboratory tested various types of contact lenses at temperatures from 40 degrees below zero to 120 degrees above. At low temperatures they were very satisfactory, much better than spectacles. At high temperatures they produced symptoms of burning, tearing and photophobia. Ackerley points out that the plastic of the contact lens is an excellent insulator. It does not allow the cornea to reach its usual temperature which is about 5 degrees below the rest of the eye.

McGraw and Enoch also found that rain, snow and mud which interfered with vision when spectacles were worn had no effect on contact lenses. However, dusty atmospheres cause more irritation with the latter.

Contraindications and Disadvantages

Agatston, Barnett and Feldstein listed these:

> 1. *Lack of clear indication for use:* This is probably the commonest contraindication to contact lenses.
>
> 2. *Poor motivation:* Unless the patient has a strong desire to wear contact lenses he should be advised against them.
>
> 3. *Marked epiphora:* In this instance the lenses will tend to float around on an excessively thick tear layer and they cannot be fitted accurately. However, some degree of excessive tearing is usual when contact lenses are worn at first.
>
> 4. *Excessive dryness:* Contact lenses depend on an adequate tear layer between them and the cornea. Any condition leading to a reduced production of tears should contraindicate the use of contact lenses.
>
> 5. *Ocular infection and allergy:* Any infection of the lids, conjunctiva or cornea is a contraindication.
>
> 6. *Other contraindications are:* Local neoplasm, degeneration of the cornea, edema of the cornea, high lenticular astigmatism, marked exophthalmos, tight lids, corneal insensitivity, presbyopia.

Comment

Published figures on the tolerance and wearing time of contact lenses depend mostly on answers to questionnaires. For example, Hodd had 72 replies (66%) to his questionnaire; Westsmith 613 (49%) and Cross 875 (47%). This makes it rather difficult to assess the full significance of their figures.

Should the wearing of contact lenses be encouraged when they are to be used for cosmetic purposes only? At the present time, this is a debatable question. A satisfactory answer can be given only after prolonged and thorough clinical observation of the effect of the latest type of contact lenses on the ocular tissues, especially on the cornea.

Berens and Nugent think that the corneal epithelium becomes "toughened" during the first few weeks of use. However, if the wearing time is increased too rapidly, punctate corneal lesions may occur and progress to an abrasion unless use of the lenses is discontinued. Ackerley states that the patient may actually be more comfortable wearing the contact lens in the presence of a corneal abrasion. This may engender a false sense of security.

Various types of corneal trauma have been reported as caused by wearing contact lenses. Tillett, in a paper presented at the Wilmer Institute in April, 1960, classified them into four categories:

1. Edge abrasions
2. Slight fitting abrasions
3. Abrasions of prolonged or excessive wearing
4. Infected abrasions or ulcers.

The edge abrasions are usually caused by the edge of the contact lens when it is being inserted. This type of injury seldom causes lasting trouble although it may be quite extensive and painful. Punctate corneal abrasions are not uncommon during the fitting period. Tillett stresses the need to use sterile fluorescein irrigating and wetting solutions during the fitting period. A more severe type of abrasion is that which results from prolonged wearing. This commonly occurs when a person who is comfortable with his lenses suddenly increases their wearing time because of a social function. Tillett described two cases in which abrasions or ulcers occurred and in which a number of superficial punctate corneal opacities persisted after treatment. In a personal communication he stated that a further two cases were described during the discussion following his paper. One case was of a lattice-like dystrophy occurring after 6 to 7 years of wearing lenses and the other a case of pyocyaneus infection with a poor visual result.

Contact lenses have recently been receiving a great amount of publicity. There have been various articles about them in popular magazines. It has been estimated that at least 6,000,000 North Americans are now wearing them and that there are approximately 120 laboratories making lenses. According to Agatston, one company alone recently filled orders for 100,000 lenses in one month. The advances since 1948 have been great and, with a large number of manufacturers in a lucrative market, it would appear likely that still better lenses and better fitting methods will be developed.

(Continued from page 254)

Annie May Anderson, a graduate of the Royal Alexandra Hospital, Edmonton in 1922, died on October 2, 1960. She had retired from nursing in 1953 after several years as assistant to the director of nursing of her hospital.

* * *

Valentine (Trewin) Anderson who graduated from Kenora General Hospital, Ont. in 1942 died during June, 1960. She had been a member of the Brandon General Hospital nursing staff.

Anne Catherine Armstrong, a 1916 graduate of Winnipeg General Hospital, died February 1, 1960. She had been a member of the Manitoba public health services for over 25 years.

* * *

Joan Elaine (Johnston) Arndt, who graduated from the Archer Memorial Hospital, Lamont, Alta. in 1956, died October 12, 1960 from injuries received in an accident. She had worked in the Medical Center, Drayton Valley, Alta. and later in the Municipal Hospital of that area.

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Nora (Knipe) Aason, a 1933 graduate of Winnipeg General Hospital, died in February, 1960.

* * *

Wilma (May) Broadhurst who graduated from St. Michael's Hospital, Toronto in 1950, died October 13, 1960.

* * *

Marjory (Taylor) Brown who graduated from Winnipeg General Hospital in 1926, died in March, 1960 after a long illness.

* * *

Alice Mae Burritt, a graduate from St. Paul's Hospital, Vancouver in 1924 died on December 13, 1960.

* * *

Clover May (Walker) Chutter who graduated from the Royal Jubilee Hospital, Victoria in 1917 died in Ottawa on December 18, 1960 after a lengthy illness. She went overseas immediately following graduation as a nursing sister, CAMC, and encountered her first action en route when the ship was torpedoed and sunk. She spent some months at a Canadian base hospital in England, before being posted to St. Omer, France and still later to Etaples. Extremely interested in welfare work, she joined her husband in Germany in 1946 at the Headquarters of the British Army of the Rhine and gave outstanding assistance in the care and rehabilitation of displaced persons, concentration camp victims and others. German civil authorities made a presentation to her in grateful recognition of her services in this regard.

* * *

Lucille Dubois who had been a public health nurse in Megantic county, Quebec since 1935, died December 22, 1960.

* * *

Isabella (Hamilton) Emmett, a 1919 graduate of the Winnipeg General Hospital, died May 30, 1960.

* * *

Edna L. (Dysart) Fairfield who graduated from Moncton Hospital, N.B. in 1938 died January 30, 1960 in Welland, Ont. She was a member of the Victorian Order of Nurses and had served in several areas in the Maritime provinces and Ontario.

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Annie (Duncan) Gardiner, a 1914 graduate of Winnipeg General Hospital, died in 1960.

* * *

Ann (Cummins) Hallohan who graduated from St. Michael's Hospital, Toronto in 1929, died April 29, 1960.

* * *

Gloria Ann Harkness who graduated from Royal Alexandra Hospital, Edmonton in 1959 died from injuries received in a car accident on October 2, 1960. She was a member of the Peace River Municipal Hospital nursing staff at the time of her death.

* * *

Lucy (Irwin) Kennedy, a 1924 graduate of St. Michael's Hospital, Toronto died there on September 5, 1960. Her professional life had been spent in private nursing.

* * *

Marjorie (Tait) Lougheed who graduated from Victoria Hospital, London, Ont. in 1917 died on March 27, 1960.

* * *

Della May (Cluff) McBride, a 1910 graduate of Hamilton General Hospital died October 9, 1960.

* * *

J. K. A. Maude (Hayward) McKee, a 1904 graduate of Winnipeg General Hospital, died May 6, 1960.

* * *

Mary (Castel) McTavish who graduated from Misericordia Hospital, Edmonton in 1943, died November 17, 1960 after a brief illness. She was on the staff of the obstetrical department of her hospital for a number of years.

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Frances Belle Myles, a 1922 graduate of Brantford General Hospital and Homewood Sanatorium, Guelph, died November 6, 1960.

* * *

Margaret Elizabeth Ogilvie who graduated from Royal Victoria Hospital, Montreal in 1916 died December 9, 1960. During World War I, she served overseas as a nursing sister for three years.

* * *

Maude Reesor who graduated from the Mack Training School, St. Catharines, Ont. in 1929, died September 6, 1960.

* * *

Monica Jean (Noonan) Rogers, a graduate of Misericordia Hospital, Edmonton in 1945 died in Calgary on August 15, 1960 after a brief illness. Recently she had been a faculty member of Holy Cross Hospital, Calgary.

* * *

Elizabeth Ruddy who graduated from the Ottawa General Hospital in 1926, died on October 18, 1960.

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Ann Freda (Robinson) Scott who graduated from Ottawa Civic Hospital in 1927, died October 6, 1960. She had engaged in private nursing during her professional career.

* * *

Irene (Davidson) Shaples, a 1937 graduate of St. Michael's Hospital, Toronto, died September 3, 1960.

* * *

Sister Mary Cecile (Bridget Byrnes), who graduated from St. Joseph's Hospital, Port Arthur in 1934, died November 12, 1960 in Peterborough, Ont.

* * *

Frances Luella (Gibson) Smith who graduated from Cobourg General Hospital, Ont. in 1931 died in Belleville, Ont. on October 23, 1960. She had been on the staff of Belleville General Hospital for a number of years.

* * *

Jean Waterson, a 1909 graduate of Woodsville General Hospital, New Hampshire, U.S.A. died in Vancouver on November 6, 1960.

* * *

Mary H. Watson who graduated from Belveder Fever Hospital, Glasgow, Scotland in 1901, died in Toronto on November 23, 1960.

* * *

Harriet Whale, a 1917 graduate of Calgary General Hospital, died in June, 1960. She served with the Canadian Army Medical Corps until the 1918 armistice and then returned to C.G.H. where she was a supervisor for many years. She was in her 81st year.

* * *

Jessie Ferguson MacKenzie, a former superintendent of nurses, Royal Jubilee Hospital, Victoria died in Seattle, Washington on December 11, 1960. Born in Toronto, Miss MacKenzie graduated as a teacher from the University of Toronto and taught for several years before entering the nursing profession. She was 93 years old.

Pioneer Ranch
A Nurses' Retreat

Marguerite E. Schumacher, M.A.

Several months ago, approximately 50 Alberta nurses "retreated" for a week-end at Pioneer Ranch on the shores of Crimson Lake, about ten miles from Rocky Mountain House in the foothills of the Rockies.

The idea of such a week-end was conceived some time previously and the planning for it went on for many months. There were doubting Thomases who thought it was impractical and illogical to even consider such an undertaking when the distance in travel was so great. Some travelled over 300 miles! The problem of arranging time off-duty seemed almost impossible. However, we can now record mission accomplished.

In spite of dreadful weather, rain and blinding snow, eight cars laden with school of nursing faculty members, head nurses, general duty nurses, public health nurses, student nurses and suitcases, arrived safely. We were warmly welcomed by Intervarsity Christian Fellowship staff members from British Columbia. A crackling fire in the open fireplace of the Ranch House, a hot cup of cocoa, and soft background music soon softened the memory of a miserably cold trip.

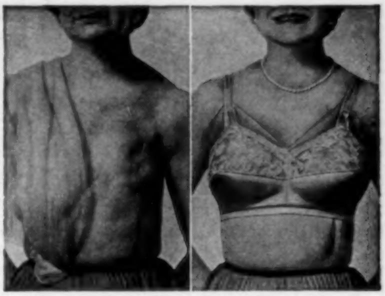
As we look back at that week-end, why is it that we can now record mission accomplished? Is it simply because a group of nurses spent a week-end together at a camp? Definitely not. Such a retreat gave us an opportunity to play together, to study together, to pray together, and to take time to think through some of the fundamental issues of life. Bible study presented a message which stirred many of us to examine ourselves and our goals in life.

This was not a week-end spent only in meditation and contemplation. The trail ride with 25 horses was certainly the most popular activity. Archery, rifle shooting and volley ball were also enjoyed. The girls sleeping in the infirmary had a novel alarm clock awakening on Sunday morning when two goat kids appeared in their cabin. One of the kids mistook a member of the group comfortably snuggled in her sleeping bag for a mountain and ascended up to keep her company!

The doubting Thomases are asking now, when can there be another nurses' camp? If we truly believe that nursing is primarily a relationship with people then we must be certain that this relationship is founded on Christian principles. Not until this has been established and assured can we give and truly minister to those in need of our service.

Miss Schumacher is School of Nursing Adviser in the province of Alberta.

after mastectomy



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Director of Nursing for 110-bed hospital in Northwestern B.C. Salary open. Excellent personnel policies. Apply stating qualifications & experience to: Administrator, General Hospital, Prince Rupert, British Columbia.

Supervisor (Evening & Night Service) for 110-bed hospital in Northwestern B.C. Salary $357 - $428. Residence available. Apply stating qualifications & experience to: Director of Nursing, General Hospital, Prince Rupert, British Columbia.

Nursing Supervisor B.C. Registered for new hospital at Golden, British Columbia, picturesque village in the beautiful Canadian Rockies, on C.P.R. & Trans-Canada Highway, 170-miles west of Calgary, Alberta. Please indicate qualifications & salary expected. Full information regarding duties & hospital operation & organization available on request. **Graduate Nurses- B.C. Registered Nurses** starting $297 per mo., Graduate Nurses $282 per mo., 28-days annual vacation, 10 statutory holidays per year, accommodation available in new modern nurses' residence on hospital grounds. Apply to: C. F. Collins, Administrator, Golden & District General Hospital, P.O. Box 230, Golden, British Columbia.

Operating Room Supervisor for 110-bed hospital, 3 surgeons, in Northwestern B.C. Salary $332 - $398, P.G. $10 extra. On-call pay with overtime. Apply stating qualifications & experience to: Director of Nursing, General Hospital, Prince Rupert, British Columbia.

Matron for R. W. Large Memorial Hospital of the United Church of Canada at Bella Bella, B.C. 300-mi. north of Vancouver on the B.C. Coast. Salary $335-$360 per mo. Also **General Duty Nurse** required. Salary $285, 2 annual increments of $5.00 per mo., transportation to Bella Bella refunded after 1-yr. Apply to: The Administrator, R. W. Large Memorial Hospital, Bella Bella, British Columbia.

General Duty Nurses for small active hospital. Salary $270 for unregistered, $285 registered with yearly increments. Nurses' home available. For further particulars write. The Administrator Lady Minto Hospital, Ashcroft, British Columbia.

General Duty Nurses for 200-bed General Hospital with School of Nursing. Salary range $297 to $359. Pre-planned shift rotation; B.C. registration essential. 4-wk vacation after 1-yr. Apply: Director of Nursing, Royal Inland Hospital, Kamloops, British Columbia.

General Duty Nurses Salary $297 per mo., increase of $12 after 1-yr. service. Charge for room, board & laundry $40; all statutory holidays paid, 28-days vacation after year's service. Graduate complement six (6). Apply: Matron, Slocan Community Hospital, New Denver, British Columbia.

General Duty Nurse for well-equipped 80-bed General Hospital. Initial salary $307, maintenance $47.50. 40-hr. 5-day wk., 4-wk. vacation with pay. Apply: Sacred Heart Hospital, Smithers, British Columbia.

General Duty Nurses for 25-bed hospital, 35-mi. Vancouver, on coast. Close to Garibaldi Park Ski-ing lodge. 1-hr. to city, bus & train service. Salary BCRN $285 - $359 (4th. yr.) non-BCRN $270 - $282 (1st. yr.) Excellent personnel policies. Apply: Director of Nursing, General Hospital, Squamish, British Columbia.

General Duty Nurses for modern 154-bed General Hospital. Basic salary $297, generous personnel policies, nurses' residence. Apply to: Director of Nurses, Trail-Tadanac Hospital, Trail, British Columbia.

General Duty Nurses: starting salary $299 if 2 yr. experience, $285-$342 in 4 yr. Non registered $270. Maintenance $50, 10 statutory holidays, 4-wk. annual vacation. 1½ day sick leave per mo. Very active town, world famous Cariboo cattle country, annual stampede. Apply: Director of Nursing, War Memorial Hospital, Williams Lake, British Columbia.

General Duty & Operating Room Nurses for 434-bed hospital with training school; 40-hr. wk., statutory holidays. Salary $297-$359. Credit for past experience & postgraduate preparation; annual increments; cumulative sick leave; 28-days annual vacation. B.C. registration required. Apply: Director of Nursing, Royal Columbian Hospital, New Westminster, British Columbia.

Graduate Nurses for 70-bed acute General Hospital on Pacific Coast. Starting salary $285 with regular increases. Board & room $25 per mo., 5-day wk., 28 days vacation plus 10 statutory holidays, after 1 year. Apply: Director of Nursing, St. George's Hospital, Alert Bay, British Columbia.

Graduate Nurses for 60-bed modern hospital in resort area on Vancouver Island. R.N. basic $297 with yearly increments according to RNABC personnel policies. Enquiries: Director of Nursing, Campbell River & District General Hospital, Campbell River, British Columbia.

Graduate Nurses for new 63-bed accredited hospital, 25-mi. East of Vancouver in Fraser Valley, RNABC contract in effect. Apply: Director of Nursing, Maple Ridge Hospital, Haney, British Columbia.

Graduate Nurse for 31-bed hospital, salary $275 per mo., **B.C. Registered Nurses** $285, with 4 annual increments of $14, 40-hr. wk., 4-wk. vacation, 1½-days sick leave per mo., Lodging $11 per mo. Fare from Vancouver refunded after 6-mo. For personnel policies & information apply to: Administrator, General Hospital, Ocean Falls, British Columbia.

MANITOBA

Registered Nurse for General Duty. Good salary & conditions. Apply Matron, Lorne Memorial Medical Nursing Unit, Swan Lake, Manitoba.

Registered Nurses (2) Immediately for 10-bed fully modern hospital. Salary $315 with increases of $5.00 following each 6-mo. service. $45 full maintenance 40-hr. wk. Apply: M. Harness, Secretary, Benito Hospital Unit, Benito, Manitoba.

Registered Nurses for 63-bed General Hospital. Salary range $295 to $335 with 40-hr. wk. Recreational facilities include curling, golfing & fishing. Apply to: J. R. Jarvis, Administrator, Swan River Valley Hospital, Swan River, Manitoba.

Registered Nurses (2), Licensed Practical Nurses (2) for active 32-bed hospital. Starting gross salary for Reg. Nurses $295, for L.P.N.'s $210, increases, $5.00 every 6-mo., 3-wk., vacation after 1 year service. Daily bus or train to either Saskatoon or Winnipeg. Apply to: Mrs. Edna Sims, District Hospital, Roblin, Manitoba.

Registered Nurses (2) or (1) Registered Nurse & (1) L.P.N. for 18-bed hospital in western Manitoba. 40-hr. wk., starting salary R.N. $305 per mo., L.P.N. $215 per mo. Board & room available $45 per mo. For further particulars & application forms please write: Miss Avis Haymen, Matron, Rossburn Medical Nursing Unit, Rossburn, Manitoba.

Registered General Duty Nurses (2) Immediately, for fully modern hospital, 36-mi. from Winnipeg, Man. on all weather highway. Salary $305 per mo., less $45 per mo. for full maintenance. 1-mo. vacation after one year, 8 statutory holidays, 42-hr. wk., $5.00 increase every 6-mo. for eight (8) increases. Fare will be re-imbursed after 6-mo. service. Apply to: Mrs. O. C. Campbell, Matron, Hunter Memorial Hospital, Teulon, Manitoba. Phone 11.

General Duty Nurses (3) for new 85-bed hospital. Good salary & generous personnel policies. Apply: Director of Nursing, Portage Hospital District #18, Portage La Prairie, Manitoba.

NOVA SCOTIA

Registered Laboratory Technician for 32-bed hospital. Excellent personnel policies, salary dependent upon qualifications & experience. Reply to: Superintendent, Queens General Hospital, Liverpool, Nova Scotia.

General Duty Nurses for modern 35-bed hospital situated on beautiful South Shore. Good personnel policies. Excellent living quarters. Apply Superintendent, Fishermen's Memorial Hospital, Lunenburg, Nova Scotia.

ONTARIO

Director of Nursing for modern 75-bed hospital. Attractive growing town of 5,500. Starting salary dependent upon qualifications & experience. Please enclose references, give full particulars & date available in letter to the: Secretary, District General Hospital, Dryden, Ontario.

Assistant Director of Nursing Service (Immediately) General Staff Nurses. For May 1961, Pediatric Clinical Teacher. For particulars, write to: Miss O'Toole, Director of Nursing Service, Hotel Dieu Hospital, Kingston, Ontario.

Operating Room Supervisor with postgraduate training, & an **Assistant Head Nurse for Obstetrical Department** in 100-bed active General Hospital in Ottawa Valley. Personnel policies include 5-day wk., 30-days cumulative sick leave, 3-wks. vacation, 7 statutory holidays. Employer participation in pension plan. Send applications to: Miss E. Sheppard, Reg.N., Director of Nursing, The Cottage Hospital, Pembroke, Ontario.

Supervisor of Nurses, Registered Nurses (2) & Certified Nursing Assistants (2) for modern 42-bed hospital in northwestern Ontario, midway between Winnipeg & Fort William. Residence accommodation available. Liberal employment benefits. Starting salary Registered Nurses $300 per mo. for nurses with Ontario registration & RNAO memberships. Starting salary Cert. N. Assistants $210 per mo. For complete information please write: The Administrator, General Hospital, P.O. Box 909, Sioux Lookout, Ontario.

Operating Room Supervisor for 163-bed sanatorium, duties to commence March 1st, 1961. Good salary & personnel policies, residence accommodation available. Apply: Director of Nursing, Sudbury & Algoma Sanatorium, P.O. Box 40, Sudbury, Ontario.

Operating Room Supervisor for 125-bed hospital. Apply to: Director of Nursing, Grace Hospital, 650 Church Street, Toronto 5, Ontario.

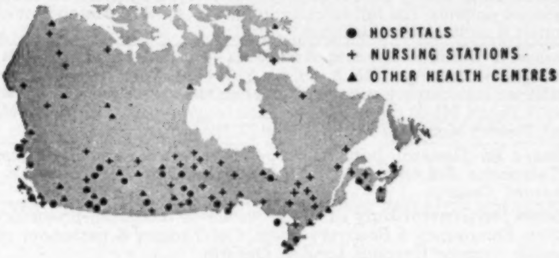
Nurses for Nurses' Technician Team (Intravenous & Intramuscular Therapy, Venepuncture etc.). 40-hr. wk., shift work. Good personnel policies. Apply: Assistant Administrator (Medical), Ottawa Civic Hospital, Ottawa, Ontario.

Registered Nurses $300 per mo. min. to max. $340, 3-weeks vacation with pay, sick leave after 6-mo. service. Non Registered — $15 less, Cert. N.A. $210 min. to max. $240, 2-wks. vacation with pay, Non Certified Cert. N.A. $200 to max. $230. Increases for both groups $10 per mo. after 1-yr. on staff. 9-statutory holidays. All staff:— 5-day 40-hr. wk. Apply: Superintendent, Englehart & District Hospital, Inc., Englehart, Ontario.

Registered Nurses ($275-$305) for 300-bed Tuberculosis Hospital, situated at the head of the lakes. Good personnel policies. For details apply to: Director of Nursing, Fort William Sanatorium, Fort William, Ontario.

Registered Nurses & Certified Nursing Assistants for 160-bed hospital. Starting salary $300 & $210 respectively with regular annual increments for both. Excellent personnel policies including 5-day wk. Hospital of Ontario pension plan. Residence accommodation available. Assistance with transportation can be arranged. Apply: Director of Nurses, Kirkland & District Hospital, Kirkland Lake, Ontario.

NURSING WITH INDIAN AND NORTHERN HEALTH SERVICES



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for positions in Hospitals, Outpost Nursing Stations and Health Centres in the Provinces, Eastern Arctic, Northwest and Yukon Territories.

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- **c) Classification I — $3,900 to $4,560 per annum**

(4) Public Health Staff Nurses — $3,600 to $4,050 per annum

(5) Hospital Staff Nurses — $3,300 to $3,750 per annum

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For interesting, challenging, satisfying work apply to — Indian and Northern Health Services at one of the following addresses:

(1) Regional Superintendent, 4824 Fraser Street, Vancouver, B.C.
(2) Regional Superintendent, 11412-128th Street, Edmonton, Alperta.
(3) Regional Superintendent, 735 Motherwell Building, Regina, Saskatchewan.
(4) Regional Superintendent, 705 Commercial Building, 169 Pioneer Avenue, Winnipeg 1, Manitoba.
(5) Regional Superintendent, 4th Floor, Booth Building, 165 Sparks Street, Ottawa, Ontario.
(6) Zone Supervisor of Nursing, Box 493, North Bay, Ontario.
(7) Zone Superintendent, P.O. Box 430, Upper Town, 3 Buade Street, Quebec 4, P.Q.
(or) Chief, Personnel Division,

Department of National Health and Welfare, Ottawa, Ontario.

Registered Nurses, Certified Nursing Assistants for modern 75-bed hospital. Starting salary: R.N.'s $300 per mo. with merit increases after 6-mo. service, C.N.A.'s $216 per mo. Single room residence accommodation available. Attractive growing town of 5,500 midway between Winnipeg & Fort William on the main line of the C.P.R. & on the Trans-Canada Highway in the midst of large tourist area. For information regarding personnel policies, community activities, etc. please write, wire or telephone to: The Director of Nursing District General Hospital, Dryden, Ontario.

Registered Nurses & Certified Nursing Assistants for immediate & future vacancies in this 42-bed hospital. Starting salary $300 & $210 respectively. Deduction for room & board $40. Excellent personnel policies. For full information apply to: Superintendent of Nurses, New Liskeard & District Hospital, New Liskeard, Ontario.

Registered Nurses & Certified Nursing Assistants for 26-bed hospital. R.N. salary $305-$352. 28-day vacation after 1-yr. C.N.A. salary $221-$252, 2-wk. vacation after 1-yr., 3-wk. after 2-yr. Credit for past experience, $5.00 increment every 6-mo., 40-hr. wk., 8 statutory holidays. Room & board $45.00 per mo., 1-day sick leave per mo. Apply to: Mrs. G. Gordon, Superintendent, District Memorial Hospital, Box 37, Nipigon, Ontario.

Registered Nurses for General Duty (2) urgently needed for 48-bed hospital. Highest salary paid. Telephone 378 or reply to: The Administrator of St. Joseph's General Hospital, Little Current, Ontario.

Registered Nurses for General Duty in all departments including premature & new-born nursery, Isolation, Emergency & Recovery Room. Good salary & personnel policies. Apply: Director of Nursing, Victoria Hospital, London, Ontario.

Registered Nurses for General Duty in modern 18-bed Private Hospital, in iron mining town, 150-mi. north of Sault Ste. Marie, Ontario. Starting salary $281 min. to $316 max. for experience, less $20 per mo. for maintenance. Excellent accommodations & personnel policies, transportation allowance after 6-mo. service. Apply: Superintendent, Miss O. Keswick, Lady Dunn Hospital, Wawa, Ontario.

Registered Nurses for General Staff & Operating Room in modern hospital (opened in 1956). Situated in the Nickel Capital of the world, pop. 50,000. **Salary: $285 per mo.** with annual merit increments, **plus annual bonus plan**, 40-hr. wk. Recognition for experience. Good personnel policies. Assistance with transportation can be arranged. Apply Director of Nursing, Memorial Hospital, **Sudbury**, Ontario.

Registered Nurses for Staff Duty & Operating Rooms in General Hospital. Modern wings increasing to 64-beds to be opened this summer. Good salary & personnel policies. Apply to: Director of Nursing, Arnprior & District Memorial Hospital, Arnprior, Ontario.

Registered Staff Nurses for Operating Room Department: A new, well equipped unit; rotating hours of duty; attractive personnel policies. Apply to: Director of Nursing, The Doctors Hospital, 45 Brunswick Avenue, Toronto, Ontario.

General Duty Nurses Male & Female & Certified Nursing Assistants (Immediately) for 86-bed hospital, 40-hr. wk., 8 statutory holidays & other employee benefits. Collingwood is situated on Georgian Bay & is noted as a vacationland with 7-mi. sand beach along with great skiing on the Blue Mountains in winter. For further information apply: Director of Nursing Services, General & Marine Hospital, Collingwood, Ontario.

General Duty Nurses & Certified Nursing Assistants for modern 50-bed active hospital, 40-hr. wk. with all statutory holidays, pension plan & sick leave benefits. Meaford is situated on Georgian Bay & is an all year resort town. For further information apply to: Director of Nursing Services, General Hospital, Meaford, Ontario.

General Duty Nurses for an accredited 64-bed hospital. Starting salary: $285, Excellent personnel policies, pension plan, residence accommodation. Apply Director of Nursing, Douglas Memorial Hospital, Fort Erie, Ontario.

General Duty Nurses for modern 100-bed hospital with building program just completed. Registered start at $285 monthly, Graduates at $250; 40-hr. wk., benefits include accident, sickness & life insurance, hospital & medical insurance plans, & O.H.A. Pension Plan. Opportunities for O.R. work. Busy hospital located near Point Pelee National Park, short drive from Detroit, Michigan. Apply: Miss Tillett, Director of Nursing, Leamington District Memorial Hospital, Leamington, Ontario.

General Duty Nurses for 100-bed hospital, up-to-date facilities in a beautiful location on the shore of Lake Erie. Salary $285 per mo. with recognition for P.G. courses, 40-hr. wk. Residence available. Apply: Director of Nursing, General Hospital, Port Colborne, Ontario.

General Duty Nurses for 100-bed modern hospital, south-western Ontario, 32-mi. from London. Salary commensurate with experience & ability; $285 gross. Residence accommodation available. Pension plan. Apply giving full particulars to: The Director of Nurses, District Memorial Hospital Tillsonburg, Ontario.

General Duty Nurses for 350-bed General Hospital located in downtown Toronto — Rotating hours of duty, attractive personnel policies, in-service education program. Apply to: Director of Nursing. The Doctors Hospital, 45 Brunswick Avenue, Toronto 4, Ontario.

General Duty Nurses for new 35-bed active hospital. Salary $250 for Registered. 40-hr. wk., 8 statutory holidays, full particulars, apply: Superintendent, Uxbridge Hospital, Uxbridge, Ontario.

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Appointments to nursing positions are available.

Good personnel policies in effect including medical welfare plan, 40 hour week — four weeks' vacation.

Salary $297 - $359 per month
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McKellar General Hospital, Fort William, Ontario has openings in all departments for **General Staff Nurses.** Basic salary $270 per mo., 40-hr. wk. Good personnel policies for other benefits. Residence accommodation available. Apply to: The Director of Nursing.

Operating Room Nurses for general operating room work which includes cardiovascular, neurosurgery, genito-urinary, Ear, Eye, Nose & Throat & orthopedic surgery. Good salary & personnel policies. Apply: Director of Nursing, Victoria Hospital, London, Ontario.

Public Health Nurses for generalized public health nursing service, in suburban & rural areas. Minimum salary $3,600 per year, car allowance, pension plan & other benefits. Apply to: Dr. D. G. H. MacDonald, M.O.H. 44 Nelson Street West, Brampton, Ontario.

Public Health Nurse (qualified) for Red Lake, Ontario. Salary $3,790 with 5 annual increments of $175, car provided, pension plan, provision for sick leave & holidays. Red Lake is in the center of a gold mining & tourist area. Apply to: Dr. E. R. Langford, M.O.H., District of Kenora Health Unit. Box 174, Kenora, Ontario.

Public Health Nurse (Qualified) for the Kapuskasing area. Bilingual preferred. Unit provides car. Other benefits — pension plan, sick leave, Ontario Hospital Association (Unit pays half), 4-wk. vacation, good salary. Apply to: Miss Mary Hedican, Secretary-Treasurer, Porcupine Health Unit, 164 Algonquin Blvd. East, Timmins, Ontario.

Nurses (2) for United Church Mission Hospital in northern British Columbia. Salary $285 per mo. An opportunity for Christian service. Apply: Wrinch Memorial Hospital, **Hazelton, British Columbia, or** Dr. M. C. Macdonald, Board of Home Missions, United Church, 85 St. Clair Avenue East, **Toronto, Ontario.**

P.E.I.

Director Public Health Nursing. Provincial (100,000 population), qualified and experienced in supervision & administration. Apply giving reference etc. to: Director, Public Health Nursing, Box 3000, Charlottetown, P.E.I.

BERMUDA

Registered Nurses for Operating Room with operating room postgraduate course and/or experience, for 140-bed hospital. Travel allowance paid. For particulars, write: Matron, King Edward VII Memorial Hospital, Bermuda.

QUEBEC

Clinical Instructor in Rehabilitation Nursing and Rehabilitation Nurse for expanding program in a New England rehabilitation facility. Full details upon request. Write Box N, The Canadian Nurse Journal, 1522 Sherbrooke Street West, Montreal 25, Quebec.

Assistant Head Nurses; excellent personnel policies. Apply Director, Shriners' Hospital for Crippled Children, 1529 Cedar Avenue, Montreal, Quebec.

Operating Room Supervisor for modern, accredited 60-bed hospital. Living accommodation available in new motel-style nurses' residence. Apply stating qualifications & salary expected to: Superintendent, Barrie Memorial Hospital, Ormstown, Quebec.

Registered Nurses for modern 60-bed General Hospital, 40-mi. south of Montreal. Salary $275 per mo. 5 semi-annual increases; monthly bonus for permanent evening & night shifts, 44-hr. wk., 4-wk. vacation. Accommodation available in new motel-style nurses' residence. Apply: Superintendent, Barrie Memorial Hospital, Ormstown, Quebec.

Registered Nurses & Trained Nursing Assistants for hospital specializing in Chest Diseases (in Montreal area). Excellent personnel policies, working conditions & accommodation in the Nurses' Home. Reply to: Box 1000, Ste. Agathe des Monts, Quebec.

Registered General Duty Nurses for 28-bed General Hospital, 45-mi. from centre of Montreal with excellent bus service. Gross salary $250 with full maintenance in nurses' home at $35; 3 increases at 6-mo. intervals to $265; 44-hr. wk., 8-hr. rotating shifts; 1-mo. annual vacation; 7 statutory holidays: 2-wk. sick leave, Blue Cross paid. Apply: Mrs. D. Hawley, R.N., County Hospital, Huntingdon, Quebec.

Supervisor & General Duty Nurse, 40-hr. wk., 8-hour day, ANPQ basic salary, 28-days vacation, 2-weeks sick leave, pension plan. Apply to: Director of Nurses, Montreal Convalescent Hospital, 3001 Kent Avenue, Montreal, Quebec.

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A large comfortable room for rent, corner St. Joseph Blvd. East & Marquette, Montreal. Kitchen & dining room privileges. One person only, $10 per week. Telephone LA 1-7397, anytime.

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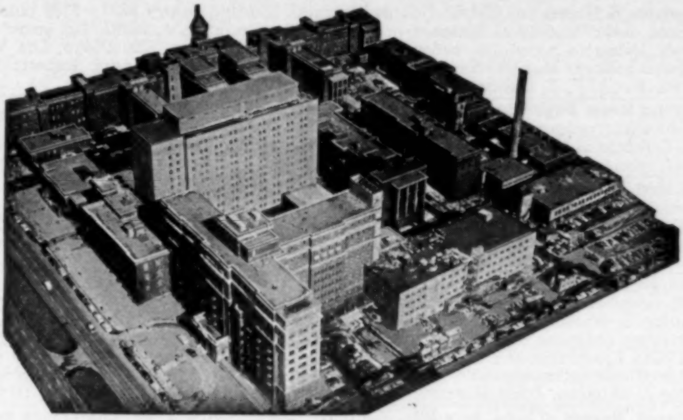
Matron, Registered Nurses (2) Immediately for Union Hospital. Salaries as per SRNA schedule, plus benefits, 40-hr. wk., daily bus service. Apply to: Fred Howlett, Secretary, Box 140, Union Hospital, Mossbank, Saskatchewan.

Registered Nurses for General Duty for 24-bed hospital, a new 34-bed hospital presently under construction. Present hospital to be converted to a nursing home for the aged. Salary schedule $290-$350 gross, $10 increments every 6-mo. Living ahsommodation available in new residence. T.V. set, board & lodging $34.50 per mo., 3-wk. vacation after 1 year service. 8 statutory holidays, 1½ days sick leave accomulative up to 90-days, 40-hr. wk., bus service daily to major city. Apply to: Secretary-Manager, Union Hospital, Leader, Saskatchewan.



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U.S.A.

Supervisors & Nurses for 80-bed County Hospital. Starting salary $337 - $395 plus normal increases, 3-wk. vacation. Situated in picturesque mountain foothills. No smog or rain, leisurely living in home-like congeniality. Near Los Angeles, San Diego, Las Vegas & 8-mi from historic Mexico. Send for descriptive letter. Mr. L. J. Lonni, Imperial County Hospital, Box 1771, El Centro, California.

Operating Room Supervisor for 238-bed JCAH approved hospital. Intern, Resident & Nursing Education programs. Candidates with BS degree preferred. Apply to: Mrs. Virginia Krahl, Director of Nursing Service, Cottage Hospital, 320 West Pueblo Street, Santa Barbara, California.

Registered Nurses for modern 374-bed JCAH fully accredited General Hospital. Located on beautiful San Francisco Peninsula, 20-min. drive from the heart of the city. Openings in all services. Excellent personnel policies. Many extra benefits & opportunities for advancement. Top salaries. Apply: Personnel Director, Peninsula Hospital, 1783 El Camino Real, Burlingame, California.

Registered Nurses, (eligible for California registration) for new 254-bed JCAH approved district hospital, San Francisco Bay area. Positions available in surgery, Gyn. O.B., pediatrics & medicine. **Staff Nurses** entrance salary $345 with range to $385 per mo. Supervisory positions at increased rate. Special area & evening differential paid. Free Blue Cross hospitalization & surgical coverage with liberal personnel policies & fringe benefits. Uniforms laundered free. Excellent modern housing, schools & colleges. Apply: Director of Nursing, Eden Hospital, 20103 Lake Chabot Road, Castro Valley, California.

Registered Nurses (Come to sunny California) **Staff Nurses for permanent positions,** various departments, days, eves, nights. Excellent starting salary, increments, benefits & working conditions in one of the largest & finest general hospitals in the West. For details write: Personnel Department, Queen of Angels Hospital, 2301 Bellevue Avenue, Los Angeles 26, California.

Registered Nurses for private 258-bed hospital for men, women & children. Staff Nurse salaries from $335 - $395, differentials for evenings, nights, communicable disease, operating room & delivery. Opportunities in all clinical areas. Holidays, vacations, sick leave & health insurance. California registration required. Applications & details furnished on request. Contact: Personnel Director, Children's Hospital, 3700 California Street, San Francisco 18, California.

Registered Nurses General Duty for 230-bed approved teaching hospital, resort city. Salary $330 plus $22.50 shift differential, provision for housing allowance. Apply: Director of Nursing, Cottage Hospital, Santa Barbara, California.

Registered Nurses for General Duty in modern, accredited 76-bed hospital — South Central California near Sequoia National Park. Good salary & benefits. Excellent working conditions. Ideal community. Winter & Summer recreation Transportation to hospital paid on suitable confirmation of employment. Must qualify for registration in California. For details write: Administrator, Memorial Hospital at Exeter, 215 Crespi Avenue, Exeter, California.

Registered General Duty Nurses (3) for small General Hospital. Starting salary $350 to $400 after 1st year. Furnished apt. available. Apply by writing: Box 336, Dos Palos, California, or Phone Collect Express 2-3450 after 6 p.m.

General Duty Nurses — J.C.A.H. accredited 100-bed hospital, 3½ hours auto distance from L.A. or San Francisco. Your choice of climate. Salary range from $351-$415 for staff duty & $392-$464 for supervision. Nurses' residence quarters $10 per mo., 40-hr. wk., 15 days vacation, 11 holidays. Social Security & Retirement Plan. 3 Canadian nurses on staff appreciated — others in nearby hospitals. Write: Director of Nursing, County Hospital, Tulare, California.

Staff Nurses for 300-bed General Hospital. Attractive personnel policies plus differential for specialties, afternoon & night duty. Opportunities for advanced education. Apply to: Director of Nursing Service, Kaiser Foundation Hospital, Oakland 11, California.

General Duty Nurses for 72-bed hospital located in college town in mountainous portion of Colorado. Salary $350 per mo. with periodic increases, fringe benefits — including meals, sick leave, vacation, etc. Contact: Superintendent, Community Hospital, Alamosa, Colorado.

Registered Nurses — Excellent opportunities for Staff Nurses in large hospital. Salary range for permanent evenings & nights $420-$450, rotating range $390 - $420. Private room accommodation at reasonable rates. Centrally located. Convenient transportation. Write to: Director of Nursing Service, Dept. A.J.N., Mount Sinai Medical Center, 2750 West 15th Place, Chicago 8, Illinois.

Registered General Duty Nurses for 154-bed General Hospital with expansion program under way. Along the shores of Lake Michigan, 25 mi. from Chicago. Salary: $365 for days, $395 for evenings, $385 for nights, 5 day wk. Good personnel policies. Apply Personnel Director, Highland Park Hospital Foundation, 718 Glenview Ave., Highland Park, Ill.

Operating Room Nurses (Days & P.M.) 154-bed General Hospital located in beautiful residential suburb along the north shore of Lake Michigan just north of Chicago. Modern ranch style nurses' homes with attractively furnished private bedrooms. 40-hr. wk. Salary: $390 days, $420 evenings, other employee benefits. Contact: Personnel Director, Highland Park Hospital Foundation, Highland Park, Illinois.

Residence, Cook County School of Nursing

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For further details write:

Director — Nursing Service, University Hospitals of Cleveland, Ohio.

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Position open in well equipped modern 111-bed hospital. U.B.C. School of Nursing affiliation. Administration courses advantageous but not essential. Salary commensurate with experience and qualifications. Submit application with complete information and references to:

MR. H. E. TAYLOR, ADMINISTRATOR, WEST COAST GENERAL HOSPITAL,
PORT ALBERNI, VANCOUVER ISLAND, BRITISH COLUMBIA.

JEFFERY HALE'S HOSPITAL
SCHOOL OF NURSING

requires

SCIENCE INSTRUCTOR
CLINICAL INSTRUCTOR

by August 1st. 1961. One Class (approximately 20) yearly in September.

Qualified applicants are asked, to write to:

MISS K. MARSHALL,
DIRECTOR OF NURSES,
JEFFERY HALE'S HOSPITAL,
QUEBEC 6, QUEBEC.

PUBLIC HEALTH NURSES

Applications are invited from Graduate Nurses holding a Diploma in Public Health Nursing or equivalent, for positions in Nova Scotia.

Salary $3,150 to $4,200, depending upon experience; uniforms are provided; cars are provided or mileage paid; Civil Service and Superannuation benefits.

For further information and Application Forms, Apply to:
DIRECTOR, DIVISION OF
PUBLIC HEALTH NURSING,
DEPARTMENT OF PUBLIC HEALTH,
BOX 488, HALIFAX, NOVA SCOTIA.

Staff Nurses for new modern 800-bed General & Tuberculosis Institution in beautiful San Joaquin Valley city — no smog — no snow — 235,000 in metro, area, midway between Los Angeles & San Francisco, close to 3 National Parks, 2 colleges & other cultural advantages. Full maintenance available. Immediate appointment. $4,320 to $5,400 per year. Apply immediately to: Director of Personnel, Fresno County Civil Service, Room 101, Hall of Records Building, Fresno 21, California.

Staff Nurses & Licensed Practical Nurses (Openings in several areas, all shifts.) 37½-hr. work wk., in small community hospital, 2-mi from Boston. Living quarters available. Minimum starting pay $70 R.N.'s., L.P.N.'s $58 per wk. Experience considered, diferentials for reliefs, nights. Contact: Director of Nurses, Chelsea Memorial Hospital, Chelsea, Massachusetts.

Registered Nurses: Transportation Paid via 1st class air to Albuquerque & return in exchange for 1-yr. employment contract. Come to New Mexico, "Land of Enchantment", largest private hospital in state — General Hospital, sanatorium & geriatric units, building program, in-service education. Vacancies for staff duty, salary $300/mo. to start, $15 differential for evenings & nights. Write or call: Mrs. Emily J. Tuttle, Director of Nursing, Presbyterian Hospital Center, 1012 Gold Avenue, S.E., Albuquerque, New Mexico, Phone Chapel 3-5611.

Graduate Nurses for 450-bed non-sectarian acute General Hospital with NLN fully accredited school of nursing. Liberal personnel policies include tuition aid for study at Western Reserve University. Opening of new main building has created attractive positions for Staff Nurses in medical, surgical, obstetric & pediatric divisions. Apartments available in immediate neighborhood. Apply: Miss Louise Harrison, Director of Nursing Service, Mount Sinai Hospital, 1800 East 105th. Street, Cleveland 6, Ohio.

Supervisors — Medical-Surgical, Pediatrics, Obstetrics & Psychiatric. Base salary $400 to $439, depending upon preparation & experience. Liberal personnel policies include sick leave, retirement plan, 3-wks. vacation & laundry of uniforms. Orientation & in-service programs. Housing available on campus or in vicinity of hospitals. Apply: Director Nursing Service, The University of Texas-Medical Branch Hospitals, Galveston, Texas.

Staff Nurses (All Clinical Services) Base salary $319, differential for 3-11 and 11-7 shifts, liberal personnel policies include sick leave retirement plan, 3-wks. vacation & laundry of uniforms. Orientation & in-service programs — housing available on campus or in vicinity of hospitals. Apply: Director of Nursing Service, The University of Texas-Medical Branch Hospitals, Galveston, Texas.

General Duty & Operating Room Nurses for 210-bed General Hospital. Start $335 days, $360 evenings, $355 nights, plus $10 for O.R., university city, 40-hr. wk., 7 holidays, extended vacations, sick leave benefits, free Blue Cross hospital-medical insurance & $2 500 life insurance, retirement program plus Social Security, extensive Intern-Resident Educational Program, living quarters available. Write, Personnel Manager, Virginia Mason Hospital, 1111 Terry Avenue, Seattle 1, Washington.

Registered Nurses (Scenic Oregon, vacation playground, skiing, swimming, boating & cultural events) for 295-bed teaching unit on campus of University of Oregon medical school. Salary starts at $339. Pay differential for nights & evenings. Liberal policy for advancement, vacations, sick leave, holidays. Apply: Multnomah Hospital, Portland 1, Oregon.

SUBURBAN TORONTO

GRADUATE NURSES & CERTIFIED NURSING ASSISTANTS

Are invited to enquire re: employment opportunities in a well staffed new 125 bed hospital in suburban west Toronto. General duty salary range: $285-$335 per mo. Certified Nursing Assistants $210-$240 per mo. 5 day week. Residence accommodation optional. Personnel manual forwarded on request. Enquire to:

DIRECTOR OF NURSING, HUMBER MEMORIAL HOSPITAL, 200 CHURCH STREET, WESTON,
TORONTO 15, ONTARIO — CH 4-5551

REGISTERED NURSES

(SUPERVISORS)

Day and evening Supervisors required for Clearwater Lake Hospital, The Pas. 150 beds for tuberculosis and extended treatment patients. Good working conditions and excellent personnel policies. Salary schedule $330-$340 per month.

For information and application apply:

DIRECTOR OF NURSING SERVICES,
SANATORIUM BOARD OF MANITOBA,
1654 PORTAGE AVENUE, WINNIPEG 12, MANITOBA.

GENERAL DUTY NURSES

FOR ALL DEPARTMENTS

Gross salary $285-$315 monthly ($131.20 - $145 bi-weekly) $265 monthly ($122 bi-weekly) until registered. Rotating periods of duty — 40 hour week, 8 statutory holidays, annual vacation 21 days. Annual sick time 12 days, cumulative to 18 days. Hospitals of Ontario, Pension plan, Ontario Hospital Insurance and Physicians' Services Incorporated, 50% payment by hospital.

Apply:

DIRECTOR OF NURSING, GENERAL HOSPITAL, OSHAWA, ONTARIO.

THE PETERBOROUGH CIVIC HOSPITAL

REQUIRES

Administrative Supervisor for Operating Room
Instructor in Surgical Nursing
Instructor in Medical Nursing

For further information write:

THE DIRECTOR OF NURSING
PETERBOROUGH CIVIC HOSPITAL, PETERBOROUGH, ONTARIO

JEWISH GENERAL HOSPITAL

MONTREAL, QUEBEC

Completion of expansion program makes available attractive positions for Registered Nurses for General Duty and also for Certified Nursing Assistants. Head Nurse and Assistant Head Nurse positions are also available in Medical and Surgical Nursing Units. Instructor with post basic preparation in Nursing Education required for School of Nursing. Excellent personnel policies. Salary in accordance with the Association of Nurses of the Province of Quebec recommendations and commensurate with experience and education.

For further information, please write:

DIRECTOR OF NURSING, JEWISH GENERAL HOSPITAL
3755 COTE ST. CATHERINE ROAD, MONTREAL, QUEBEC

HEALTH EDUCATION BURSARY

REQUIREMENTS

1. Baccalaureate degree with preparation in public health and education. Education courses may be supplemented at summer school prior to fall admissions. Must have high scholastic standing to meet the admission requirements of the University of Michigan or California.
2. At least 3 years professional experience.
3. Three letters of recommendation. We are only interested in true leaders.
4. A personal interview must be arranged by you at the OTA office.
5. At least 2 years service with the OTA following the course. Must be free to travel throughout the province and to locate in a specified region in order to develop the health education program.

Amount:

Bursary $3,600; Salary $4,800 minimum plus expenses.

Apply:

MISS FLORIS E. KING, B.Sc.N., M.P.H.,
HEALTH EDUCATION CONSULTANT,
ONTARIO TUBERCULOSIS ASSOCIATION,
3050 YONGE ST., TORONTO 12, ONT.

VICTORIA HOSPITAL

LONDON, ONTARIO

Modern 900-bed hospital

requires

Registered Nurses for all services

and

Certified Nursing Assistants

40 hour week - pension plan - good salaries and personnel policies.

Apply:

DIRECTOR OF NURSING
VICTORIA HOSPITAL
LONDON, ONTARIO.

CHILDREN'S HOSPITAL OF WASHINGTON, D.C.

OFFERS

Registered Nurses a 16-wk. supplementary program in pediatric nursing. Admission dates, January 3, May 2, August 29, 1961; January 3, May 8, 1962.

For complete information write to:

DIRECTOR OF NURSING
2125-13th STREET, N.W., WASHINGTON 9, D.C.

INSTRUCTORS

with postgraduate preparation

required

in 160-bed General Hospital
School of Nursing for:

NURSING SCIENCE
FOUNDATIONS OF NURSING
MEDICAL CLINICAL

Duties to commence August 1961

Apply in writing to:

PERSONNEL OFFICER
BRANDON GENERAL HOSPITAL
BRANDON, MANITOBA

ASSISTANT DIRECTOR

Applications are invited for the position of Assistant Director - Nursing Services, University Hospital, Saskatoon, Saskatchewan, a 550-bed hospital situated on the Campus. University preparation desirable.

Apply to:

DIRECTOR OF NURSING SERVICES,
UNIVERSITY HOSPITAL, SASKATOON, SASKATCHEWAN.

DISTRICT OF KENORA HEALTH UNIT
KENORA, ONTARIO

requires

2 Public Health Nurses

Salary: - Minimum — $3,500 Maximum — $4,375

Car provided, pension plan, attractive personnel policies. This progressive Health Unit is situated in the heart of the Lake of the Woods tourist area.

Apply to:

DR. E. R. LANGFORD, M.O.H., DISTRICT OF
KENORA HEALTH UNIT, BOX 174, KENORA, ONTARIO

KINGSTON GENERAL HOSPITAL

requires

GENERAL DUTY NURSES

for:

Medical, Psychiatric and Surgical Floors (male or female Registered Nurses considered for all above positions)

Certified Nursing Assistants

For full details relating to hours, vacations and benefits, apply to:

DIRECTOR OF NURSING,
KINGSTON GENERAL HOSPITAL,
KINGSTON, ONTARIO

BURLINGTON, ONTARIO

REGISTERED NURSES

and

CERTIFIED NURSING ASSISTANTS

are needed for
a new 225 bed hospital
to be opened
February 1961

For information, write to:

DIRECTOR OF NURSING
JOSEPH BRANT MEMORIAL HOSPITAL
1240 NORTH SHORE BLVD.,
BURLINGTON, ONTARIO

UNIVERSITY HOSPITAL

SASKATOON, SASKATCHEWAN

Requires

General Staff Nurses for Medical, Surgical, Obstetrical and Pediatric Services. Forty hour week. Salary $280 to $320 gross per month. Differential for evening and night duty. Temporary residence accommodation if desired.

Apply to:

DIRECTOR OF NURSING, UNIVERSITY HOSPITAL,
SASKATOON, SASKATCHEWAN

GENERAL DUTY NURSES

Salary $280 - $325 per month. 40 hour week, 3 weeks plus 9 statutory holidays with pay, sick leave cumulative from date of employment to 90 days, 13-bed hospital. Board and room $34.50 per month. This hospital is located 30 miles from (City of Bridges) Saskatoon on a blacktop highway.

APPLY:

DOREEN CAMPBELL, MATRON,
DELISLE UNION MEMORIAL HOSPITAL, DELISLE, SASKATCHEWAN.

THE SCHOOL OF NURSING, METROPOLITAN GENERAL HOSPITAL

REQUIRES

INSTRUCTOR IN PEDIATRIC NURSING

This is an opportunity to be a member of the faculty in a progressive school which emphasizes educational experiences for the student in a program pattern of two years of nursing education followed by one year internship. One class of 30 students is admitted yearly. Duties include clinical and classroom instruction.

Requirements: University preparation in Nursing Education
Salary differential for degree.

For further information apply to:

DIRECTOR, SCHOOL OF NURSING, 2240 KILDARE RD., WINDSOR, ONT.

SCHOOL OF NURSING ADVISER

APPLICATIONS ARE INVITED BY

The New Brunswick Association of Registered Nurses.
Qualifications required: a degree in nursing, senior experience in nursing education and nursing service. Personnel policies include pension plan. Terms of reference available on request.

Apply to: The Executive Secretary
THE NEW BRUNSWICK ASSOCIATION OF REGISTERED NURSES
231 SAUNDERS STREET — FREDERICTON, N.B.

McKELLAR GENERAL HOSPITAL

School of Nursing

will have openings for

INSTRUCTORS

in Medicine, Surgery and Pediatrics
by July 15th, 1961

Qualified applicants are invited to apply:

Salary commensurate with experience and qualifications.

Apply to:

DIRECTOR,
McKELLAR GENERAL HOSPITAL,
FORT WILLIAM, ONTARIO.

DUKE UNIVERSITY

Medical Center Hospital

invites you to
Join its Nursing Staff

Opportunities in all services

Scholarship Program

Excellent personnel policies

Cultural, Educational, Recreational Activities available in southern university community

Write:

DIRECTOR OF NURSING SERVICE,
DUKE UNIVERSITY MEDICAL CENTER HOSPITAL,
DURHAM, NORTH CAROLINA.

HAMILTON GENERAL HOSPITALS

Opportunities for

PROFESSIONAL NURSES

Positions available in all Clinical Areas

(1) Obstetrical Unit

Apply to:
SUPERINTENDENT OF NURSING,
MOUNT HAMILTON HOSPITAL,
CONCESSION STREET,
HAMILTON, ONTARIO.

(2) Medical Unit

Apply to:
SUPERINTENDENT OF NURSING,
NORA-FRANCES HENDERSON HOSPITAL,
CONCESSION STREET,
HAMILTON, ONTARIO.

(3) Medical - Surgical - Pediatric Unit & Operating Room

Apply to:
DIRECTOR OF NURSING,
HAMILTON GENERAL HOSPITAL,
BARTON STREET EAST,
HAMILTON, ONTARIO.

Personnel Policies sent on request.

JEAN TALON HOSPITAL

(360 BEDS)

MONTREAL

REGISTERED NURSES WANTED

Excellent working conditions: pension plan, salary range $60 - $80 per week according to qualifications.

Statutory holidays, paid sick leave, paid vacation, life insurance, sickness insurance.

Free: laundering of uniforms.

For further information write to:

LA DIRECTRICE DU NURSING
HOPITAL JEAN-TALON
1385 EST, RUE JEAN-TALON
MONTREAL 35

NOTRE DAME HOSPITAL OF MONTREAL

NURSES NEEDED

Salary, according to qualifications: $57.00 - $90.00 per week.
Evening differential: $7.00 per week. — Night differential: $5.00 per week.
Increases: After 6 months, 1 year, 2 years.
Free: Two meals daily — Laundering of uniforms.
Statutory holidays - 10 days; Paid sick time - 2 weeks (after 1 year)
Paid vacation: 3 weeks after 1 year, Pension plan.
Opportunities for promotion — Inservice education program.

For further information, write to:

LA DIRECTRICE DU NURSING — HOPITAL NOTRE-DAME — MONTREAL

GENERAL DUTY NURSES

for all departments in a new 107 bed hospital.

Gross salary for Registered Nurses - $295, 40 hour week, 3 weeks vacation annually. Group pension plan and residence accommodation if desired.

Apply: Director of Nursing,

ST. JOSEPH'S GENERAL HOSPITAL, ELLIOT LAKE, ONTARIO.

HEAD NURSE

required by

ALCOHOLISM RESEARCH FOUNDATION, TORONTO, ONTARIO

For supervision of nursing services in a small hospital and out-patient clinic. Duties will also involve supervision of educational procedures for nursing groups outside the institution.

Candidates should have postgraduate training in psychiatry and experience in psychiatric nursing.

Salary approximately in accordance with Registered Nurses' Association of Ontario.

Applications should be directed to:

MEDICAL DIRECTOR, ALCOHOLISM RESEARCH FOUNDATION,
24 HARBORD STREET, TORONTO 5, ONTARIO.

VICTORIAN ORDER OF NURSES FOR CANADA

has Staff and Supervisory positions in various parts of Canada.

Personnel Practices Provide:

- Opportunity for promotion.
- Transportation while on duty.
- Vacation with pay.
- Retirement annuity benefits.

For further information write to:

Director in Chief,
Victorian Order of Nurses for Canada
5 Blackburn Ave., Ottawa 2, Ontario

REGISTERED NURSES
AND
CERTIFIED NURSING ASSISTANTS

REQUIRED FOR

44-bed hospital with expansion program, 40-hr. wk. Situated in the Niagara Peninsula. Transportation assistance.

For salary rates & personnel policies
APPLY TO: DIRECTOR OF NURSING,
HALDIMAND WAR MEMORIAL HOSPITAL,
DUNNVILLE, ONTARIO

THE GENERAL HOSPITAL OF PORT ARTHUR

Invites applications from

Registered Nurses for General Staff positions.

Excellent personnel policies.

For further information write:

THE DIRECTOR OF NURSING
THE GENERAL HOSPITAL OF PORT ARTHUR
PORT ARTHUR, ONTARIO.

WOMAN'S HOSPITAL

invites you to
Further your Nursing Experience
Opportunities open for
GRADUATE NURSES
in all areas
Liberal personnel policies
Hospital within walking distance of
Wayne State University
Every effort is made to provide the opportunity for each nurse to reach her potential
Must be eligible for registration in the State of Michigan

Write:
WOMAN'S HOSPITAL,
PERSONNEL DEPARTMENT
432 E. HANCOCK
DETROIT 1, MICHIGAN

REGINA GENERAL HOSPITAL
School of Nursing

requires

CLINICAL INSTRUCTORS

in Obstetrical, Surgical and Communicable Disease Nursing.

S.R.N.A. salary scales apply.

Apply to:

Associate Director, Nursing Education,
School of Nursing,
Regina General Hospital,
Regina, Saskatchewan.

OTTAWA CIVIC HOSPITAL

requires

GENERAL STAFF NURSES

for

OPERATING ROOM
MEDICAL
SURGICAL &
OBSTETRICAL } DEPARTMENTS

Apply

EDITH G. YOUNG, REG.N.,
ADMINISTRATOR OF NURSING

GENERAL DUTY NURSES

WANTED

Salary — $265 - $315 per month 40-hour week, no split shifts.

Vacation — 3 weeks after one year; statutory holidays — eight (8); sick leave — cumulative from date of employment.

Transportation — advanced on repayable basis For 75-bed fully accreditated hospital built in 1956, located in south-western Ontario.

Apply to: Director of Nursing,
SYDENHAM DISTRICT HOSPITAL
WALLACEBURG, ONTARIO

PUBLIC HEALTH NURSES

REQUIRED FOR HEALTH BRANCH

B.C. CIVIL SERVICE

Positions available for qualified Public Health Nurses in various centres in British Columbia. SALARY $346-$405 per month; car provided. An opportunity for interesting and challenging professional service in this beautiful and fast-developing Province. For further information and application forms, write to The Director, Public Health Nursing, Department of Health Services and Hospital Insurance, Parliament Buildings, Victoria, B.C., or The Chairman, B.C. Civil Service Commission, 544 Michigan Street, Victoria, B.C.

COMPETITION NO. 60:484.

GENERAL DUTY NURSES WANTED

Salary - $300 to $320 per month 40 hour week, no split shifts.

Vacation - 18 days plus 10 statutory holidays a year, 21 days sick leave cumulative from time of employment.

Transportation will be advanced if necessary.

Apply: Matron,
BERWYN MUNICIPAL HOSPITAL,
BERWYN, ALBERTA.

EDUCATIONAL OPPORTUNITIES

AN EXTENSION COURSE IN NURSING UNIT ADMINISTRATION

Those nurses who are interested in enrolling for the Extension Course in Nursing Unit Administration should submit their applications not later than April 30th, 1961. Applications will be accepted from nurses who are engaged in positions of assistant head nurses, head nurses or supervisors and who are unable to attend a university school of nursing. Directors of nurses in small hospitals may also enroll.

The course will start with a workshop in September to be followed by a seven month period of home study. A final workshop will be held in May 1962.

This course is jointly sponsored by the Canadian Nurses' Association and the Canadian Hospital Association.

Information and application forms may be obtained by writing to:

DIRECTOR, EXTENSION COURSE IN NURSING UNIT ADMINISTRATION,
25 IMPERIAL STREET, TORONTO 7, ONTARIO.

McMASTER UNIVERSITY

DEGREE COURSE IN BASIC NURSING (B.Sc.N.)

A *Four-Year Course designed* to prepare students for all branches of community and hospital nursing practice and leading to the degree, Bachelor of Science in Nursing (B.Sc.N.). It includes studies in the humanities, basic sciences and nursing. Bursaries, loans and scholarships are available.

For additional information, write to:

School of Nursing,
McMaster University, Hamilton, Ontario.

QUEEN'S UNIVERSITY SCHOOL OF NURSING

COURSES OFFERED

Undergraduate

Degree Course, 5 years leading to BNSc. Degree

Graduate Nurses

a. Degree Course, two years.
b. Diploma Courses, one year.

Public Health Nursing

or

Teaching and Supervision in Schools of Nursing.

For information apply to:

DIRECTOR
SCHOOL OF NURSING,
QUEEN'S UNIVERSITY
KINGSTON, ONTARIO

UNIVERSITY OF SASKATCHEWAN

SCHOOL OF NURSING
in cooperation with
UNIVERSITY HOSPITAL

PROGRAMS FOR GRADUATE NURSES

Teaching and Supervision. To prepare for positions in teaching and supervision in Schools of Nursing.

Public Health Nursing. To prepare for staff positions in all types of public health nursing agencies.

Administration of Hospital Nursing Service. To prepare for head nurse, supervisor or matron positions in large or small hospitals.

Credits earned may be applied toward the degree of Bachelor of Science in Nursing.

PROGRAMS FOR HIGH SCHOOL GRADUATES

Bachelor of Science in Nursing. Students with senior matriculation may enroll in a combined academic and professional program.

Diploma in Nursing. The School also conducts a three-year hospital program.

For further information apply to:

DIRECTOR, SCHOOL OF NURSING,
UNIVERSITY OF SASKATCHEWAN,
SASKATOON, SASKATCHEWAN.

SCHOOL for GRADUATE NURSES
McGILL UNIVERSITY

PROGRAM FOR GRADUATE NURSES LEADING TO THE DEGREE OF BACHELOR OF NURSING

Two-year program for nurses with McGill Senior Matriculation or its equivalent. Three-year program for nurses with McGill Junior Matriculation or its equivalent. In the first year students elect Public Health Nursing or Teaching and Supervision in one of the following clinical fields: Medical-Surgical Nursing, Psychiatric Nursing, Maternal and Child Health Nursing.

In the second year students elect to study in one of the following fields: Nursing Education, Administration in Hospitals and Schools of Nursing, Administration in Public Health Nursing.

PROGRAM FOR GRADUATE NURSES LEADING TO A DIPLOMA

Students are granted a diploma on the completion of the first year of the degree program. All first-year students elect to study in a particular field as stated above.

PROGRAM IN BASIC NURSING LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN NURSING

Five-year program for high-school graduates who have passed in the required papers of the McGill Junior School Examination or their equivalents. This program combines academic and professional courses with supervised nursing experience in the McGill teaching hospitals and selected health agencies. This broad background of education, followed by graduate professional experience, prepares the nurses for advanced levels of service in hospitals and community.

For further information write to:

DIRECTOR, McGILL SCHOOL FOR GRADUATE NURSES,
1266 PINE AVE. W., MONTREAL 25, QUEBEC.

CLINICAL COURSE IN PSYCHIATRIC NURSING

Offered by

THE MENTAL HEALTH SERVICES, BRITISH COLUMBIA

to

Nurses eligible for B.C. registration

- **Admission: April, 1961 and Fall, 1961**
- **Six month program of instruction and practice**
- **Reasonable monthly stipend**
- **Room and Meals at nominal rates**

For further information please write to:

ASSOCIATE DIRECTOR, DEPARTMENT OF NURSING EDUCATION,
ESSONDALE, B.C.

ROYAL VICTORIA HOSPITAL

SCHOOL OF NURSING

MONTREAL, QUEBEC

Postgraduate Courses

1. (a) Six month clinical course in Obstetrical Nursing.
   Classes—September and February.
   (b) Two month clinical course in Gynecological Nursing.
   Classes following the six month course in Obstetrical Nursing.
   (c) Eight week course in Care of the Premature Infant.

2. Six month course in Operating Room Technique and Management.
   Classes—September and March.

3. Six month course in Theory and Practice in Psychiatric Nursing.
   Classes—September and March.

Complete maintenance or living-out allowance is provided for the full course.

Salary—a generous allowance for the last half of the course.

Graduate nurses must be registered and in good standing in their own Provinces.

For information and details of the courses, apply to:—

Miss H. M. Lamont, B.N.
Director of Nursing,
Royal Victoria Hospital
Montreal, P.Q.

ST. JUSTINE'S HOSPITAL

offers
Postgraduate courses for
REGISTERED NURSES
in

- Pediatrics in cooperation with the Marguerite d'Youville Institute, and leading to a university certificate as well as a postgraduate course in the
- Care of the Premature Infant in cooperation with the Minister of Health of the Province of Quebec.
- As well as two other eight-month postgraduate courses in:
- Pediatrics and
- Obstetrics.

Admission in October.
Ability to speak French essential.

For further information write to:

LA DIRECTRICE
DE L'ECOLE DES INFIRMIERES,
HOPITAL SAINTE-JUSTINE
3180 AVENUE ELLENDALE
MONTREAL 26, QUE.

POSTGRADUATE COURSES

FOR

REGISTERED NURSES

Notre Dame Hospital of Montreal

- GENERAL MEDICINE
- GENERAL SURGERY
- OPERATING ROOM
- OBSTETRICS

Classes: March and September
Duration: 6 months

Substantial remuneration
Meals and laundry provided.
Ability to speak French essential.

For further information write to:

LA DIRECTRICE DU NURSING
HOPITAL NOTRE-DAME
1560 EST, SHERBROOKE,
MONTREAL, QUEBEC.

DALHOUSIE UNIVERSITY

School of Nursing

Degree Course in Basic Professional Nursing

Candidates for the degree of Bachelor of Nursing are required to complete 2 years of university work before entering the clinical field, and one year of university work following the basic clinical period of 30 months. On completion of the course the student receives the **Degree** of Bachelor of Nursing **and** the **Professional Diploma** in either Teaching in Schools of Nursing or Public Health Nursing.

Degree Course for Graduate Nurses

Graduate nurses who wish to obtain the degree of Bachelor of Nursing are required to complete the three years of university work.

Diploma Courses for Graduate Nurses

(a) Public Health Nursing
(b) Teaching in Schools of Nursing
(c) Nursing Service Administration

For further information apply to:

DIRECTOR, SCHOOL OF NURSING
DALHOUSIE UNIVERSITY, HALIFAX, N.S.

UNIVERSITY OF TORONTO

SCHOOL OF NURSING — SESSION 1961-62

I BASIC DEGREE COURSE IN NURSING (B.Sc.N.)

Length: 4 years

This course provides study in nursing and in the sciences and humanities with practice in hospitals and health agencies. The course prepares for practice under the Nurses Registration Act of the Province of Ontario. Graduates are qualified for both public health and hospital nursing, and following experience are qualified for supervisory positions and for teaching in schools of nursing.

II DEGREE COURSE FOR GRADUATE NURSES (B.Sc.N.)

Length: 3 years

This course provides studies in the humanities, sciences and nursing. Applicants select a field of professional specialization such as Hospital Nursing Service, Nursing Education or Public Health Nursing.

III CERTIFICATE COURSES FOR GRADUATE NURSES

Length: 1 year

*Nursing Education
*Hospital Nursing Service
Public Health Nursing
Public Health Nursing — Advanced Course.

*Students who wish to take preparation in Psychiatric Nursing may register in Hospital Nursing Service or Nursing Education and include special work in Psychiatric Nursing.

For Calendar and Information concerning Bursaries and Scholarships apply to:

THE SECRETARY
UNIVERSITY OF TORONTO, SCHOOL OF NURSING, TORONTO 5, ONT.

TEST POOL EXAMINATIONS
FOR
REGISTRATION OF NURSES
IN
NOVA SCOTIA

To take place on May 24, 25 and 26, 1961 at Halifax, Yarmouth, Amherst, Sydney and Antigonish. Requests for application forms should be made at once and forms must be returned to the Registrar **not later than April 14, 1961** together with

1. **Diploma of School of Nursing.**
2. **Fee of Fifteen Dollars ($15.00)**

Applications received after this date will not be accepted. No undergraduate may write unless he or she has passed successfully all final school of nursing examinations and is within six (6) weeks of completion of the course in nursing.

NANCY H. WATSON, R.N., REGISTRAR,
THE REGISTERED NURSES' ASSOCIATION
OF NOVA SCOTIA,
73 COLLEGE STREET, HALIFAX, N.S.

NOVA SCOTIA SANATORIUM
KENTVILLE N.S.

Offers to Graduate Nurses a Three-Month Course in ***Tuberculosis Nursing,*** including Immunology, Prevention, Medical & Surgical Treatment.

1. Full series of lectures by Medical and Surgical staff.
2. Demonstrations and Clinics.
3. Experience in Thoracic Operating Room and Postoperative Unit.
4. Full maintenance, salary & all staff privileges.

For information apply to:

DIRECTOR OF NURSING, NOVA SCOTIA
SANATORIUM, KENTVILLE, N.S.

THE CHARLES T. MILLER HOSPITAL

offers qualified Graduate Nurses a 16 weeks' course in

OPERATING ROOM NURSING.

The course includes instruction and supervised experience in all surgical specialties as well as teaching and management techniques.

Room, board, laundry and a stipend of $125 per month are provided.

For further information, address the

DIRECTOR OF NURSING,
THE CHARLES T. MILLER
HOSPITAL,
ST. PAUL 2, MINNESOTA.

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